# BRITISH ZOOLOGY.

## CLASS I.

### QUADRUPEDS.

Si qui ſint, qui in urbe ſua hoſpites, in patria ſua peregrini, et cognitione ſemper puerr eſſe velint, ſibi per me placeant, ſibi dormiant, non ego illis hæc conſcripſi, non illis vigilavi. _____ Camdeni Brit. Præfat.

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# BRITISH ZOOLOGY.

## VOL. I.

## CLASS I. QUADRUPEDS.

## II. BIRDS.

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MDCCLXXVI.

# PREFACE.

AT a time, when the ſtudy of natural hiſtory ſeems to revive in *Europe*; and the pens of ſeveral illuſtrious foreigners have been employed in enumerating the productions of their reſpective countries, we are unwilling that our own iſland ſhould remain inſenſible to its particular advantages; we are deſirous of diverting the aſtoniſhment of our countrymen at the gifts of nature beſtowed on other kingdoms, to a contemplation of thoſe with which (at leſt with equal bounty) ſhe has enriched our own.

A judicious Foreigner has well remarked, that an *Engliſhman* is excuſable ſhould he be ignorant of the papal hiſtory, where it does not relate to *Great Britain*; but inexcuſable ſhould he neglect inquiries into the origin of parlements, the limitation of the royal prerogative, and the gradual deviation from the feodal to the preſent ſyſtem of government.

The obſervation is certainly juſt, and the application appears too obvious to be pointed out; yet the generality of mankind can reſt contented with ignorance of their native ſoil, while a paſſion for novelty attracts them to a ſuperficial examination of the wonders of *Mexico*, or *Japan*; but theſe ſhould be told, that ſuch a paſſion is a ſure criterion of a weak judgement: utility, truth and certainty, ſhould alone be the point at which ſcience ſhould aim; and what knowledge can be more uſeful than of thoſe objects with which we are moſt intimately connected? and where can we reaſon with greater certainty on ſuch points, than in our own country, where a conſtant recourſe may be had to the ſpecimen of what we have under conſideration? But theſe, and many other arguments for examining into the productions of our own iſland, may here be waved, as the admirable LINNÆUS has diſplayed them at large in an oration *, which for maſterly reaſoning, and happy ingenuity, may vie with the beſt compoſitions.

Yet, as that great naturaliſt has, in the ſame tract, publiſhed an eulogium on *Sweden*; and as an incitement to his countrymen to apply themſelves to the ſtudy of nature, enumerated the natural productions of that kingdom; we ſhall here attempt a parallel, and point out to the *Britiſh* reader, his native riches; many of which were probably unknown to him, or perhaps ſlightly regarded.

* *Amœn. Acad. Tom.* II. p. 409. *Stillingfleet's Swediſh* Tracts, Tr. 1.

Do the heights of *Torſburg*, or *Swucku*, afford more inſtruction to the naturaliſt than the mountains of *Cumberland*, or *Caernarvonſhire?* whoſe ſides are covered with a rich variety of uncommon vegetables, while their bowels are replete with the moſt uſeful minerals. The *Derbyſhire* hills, abounding in all the magnificence of caves and cliffs; the mountains of *Kerry*, and that ſurprizing harbour the *Bullers* of *Buchan* *, may well be oppoſed to the rocks of *Blackulla*, or the caverns of *Skiula*. *Sweden* can no where produce a parallel to that happy combination of grandeur and beauty in *Keſwick* † vale, or *Killarny* ‡ lake; nor can *Europe* ſhew a natural wonder equal to the *Giant's Cauſeway* in the north of *Ireland*.

The excellence and number of our ſprings (whether medicinal or incruſting) are well known to common inquirers.

Our minerals are as great in quantity, as rich in quality: of gold, indeed, we cannot produce many ſpecimens, yet ſufficient to ſhew that it is found in this iſland §; but ſilver

* Between *Aberdeen* and *Peterhead*.

† In *Cumberland*.

‡ In the county of *Kerry*.

§ That our country produces gold, appears in Dr. *Borlaſe*'s Hiſtory of *Cornwall*, p. 214. So late as the year 1753, ſeveral pieces were found in what the miners call *ſtream tin*; one ſpecimen was as thick as a gooſe quill; others weighed to the value of ſeventeen ſhillings, twenty-ſeven ſhillings, and another even to the value of three guineas.

is found in great abundance in our lead ores, and veins of native ſilver in the copper ore of *Muckrus*, on the lake of *Killarny*. The hæmatites iron ores of *Cumberland*, and the beautiful columnar iron ores of the foreſt of *Dean*, are ſufficient to diſplay our riches in that uſeful commodity. No country produces ſo great a quantity of tin as *Cornwall*; and that county, and ſeveral others in the north have been long noted for their inexhauſtible veins of copper; nor leſs famous are the lead mines of *Derbyſhire*, *Cardiganſhire* and *Flintſhire*, which have been worked for ages, yet ſhew no ſign of the decline of their ſtores.

In all theſe, nature ſports with great luxuriancy; the cryſtallized lead ore of *Tralee* *, the fibrous lead ore of *Tipperary*; the laminated lead ore of *Lord Hoptoun*'s mines; the cryſtalized tins, and the figured ores of *Zink*, are equally noted for their elegance, ſcarcity, and richneſs.

The ore of *Zink*, or *Lapis Calaminaris*, is found in vaſt quantities in the counties of *Somerſet* and *Flint*; while *black lead* or *wadd*, a ſubſtance ſcarce known in other kingdoms, abounds in the mountains of *Cumberland*.

To the *Swediſh Petroleum*, we may oppoſe the Well at *Pitchford*, and that of *St. Catherine*'s near *Edinburgh*. Our amber and our jet, together with our inexhauſtible ſtrata of coal found in ſo many parts of this kingdom, will,

* In the county of *Kerry*.

in

in the article of bitumens, give us the ſuperiority over theſe ſo much boaſted productions of *Sweden*.

To avoid a tedious enumeration, we ſhall only mention our wonderful mines of rock ſalt; our allum and our vitriol works; our various marbles, alabaſters, and ſtones; our moſt excellent clays and earths *; all which articles, and many more unnoted here, might have furniſhed us with an ample field for panegyric.

Our botanical productions are not leſs abundant; but the works of *Ray*, which have lately been much enlarged and methodized, according to the *Linnæan* ſyſtem, by the ingenious Mr. *Hudſon*, in his *Flora Anglica*, are a ſufficient diſplay of our vegetable riches.

Our Zoology would be a copious ſubject to enlarge on, but the work in hand reſtrains us from anticipating our reader's curioſity. We might expatiate on the clouds of *Soland* geeſe which breed on the *Baſs iſland*, or *Puffins* on that of *Prieſtholme*: on our fiſh, and other marine animals; on our inſects, and the various other ſenſitive productions of this kingdom; but we forbear a parade of uſeleſs declamation, and ſhall only add, that as few countries receive more advantages from their natural breed of quadrupeds,

* If the inquiſitive reader is deſirous of a farther account of the number and excellence of our ſubterraneous productions, we refer him to the learned Dr. *Woodward*'s Catalogue of the *Engliſh Foſſils*, *London* 1729, particularly to p. 5.

unmixed

unmixed with any beaſt that preys on man, ſo, few can boaſt a greater variety of birds, whether local, or migratory.

This is a general view of the natural hiſtory of our own country; why then ſhould we neglect inquiring into the various benefits that reſult from theſe inſtances of the wiſdom of our Creator, which his divine munificence has ſo liberally, and ſo immediately placed before us? Such a neglect is certainly highly to be blamed, for (to expreſs ourſelves in the words of an eminent writer) "the Creator "did not beſtow ſo much curioſity, and workmanſhip on "his creatures, to be looked on with a careleſs incurious "eye, eſpecially to have them ſlighted or contemned; but "to be admired by the rational part of the world, to mag-"nify his own power to all the world, and the ages there-"of; and ſince the works of the creation are all of them "ſo many demonſtrations of the infinite wiſdom and power "of God, they may ſerve to us, as ſo many arguments, "exciting us to a conſtant fear of the Deity, and a ſteady "and hearty obedience to all his laws." *

Much might be added to this ſubject, if conſidered in a theological light; but ſince the writings of *Boyle*, *Ray*, and *Derham*, fully prove that the ſtudy of natural hiſtory enforces the theory of religion and practice of morality, we

* *Derham*'s Phyſ. Theol. Book XI. c. 24.

had

had better refer to their works in general, than mangle them by imperfect quotations.

To exalt our veneration towards the Almighty, is the principal end of this ſublime ſcience; and next to that, the various benefits reſulting from it to human ſociety deſerve our ſerious conſideration.

To give an obvious inſtance: what wonderful changes have been made in human affairs by the diſcovery of an obſcure mineral. The antients, ignorant of the application of the magnet, timidly attempted a mere coaſting navigation; while we, better informed of the uſes of it, traverſe the wideſt oceans, and by the diſcovery of the new world, have layed open to ſcience, an inexhauſtible fund of matter.

The riſe and progreſs of medicine, kept pace with the advancement of this moſt important diſcovery; and though neceſſity was the parent of the mechanic arts, yet they alſo throve, and grew to maturity, under the ſame influence.

Many more inſtances might be added to this brief view of the utility of natural knowlege; but we ſhall only give ſome of its uſes in the polite arts, which have hitherto been too little connected with it.

To inſtance particularly in painting, its uſes are very extenſive: the permanency of colors depends on the goodneſs of the pigments; but the various animal, vegetable, and foſſil ſubſtances (out of which they are made) can only be known by repeated trials; yet the greateſt artiſts have failed

in this reſpect: the ſhadows of the divine *Raphael* have acquired an uniform blackneſs, which obſcures the fineſt productions of his pencil, while the paintings of *Holbein*, *Durer*, and the *Venetian-ſchool*, (who were admirably ſkilled in the knowlege of pigments) ſtill exiſt in their primitive freſhneſs.

But theſe advantages are ſmall, compared to thoſe derived from the knowlege of nature in the repreſentation of objects: painting is an imitation of nature; now, who can imitate without conſulting the original? But to come to what is more particularly the object of our inquiries; animal and vegetable life are the eſſence of landſcape, and often are ſecondary objects in hiſtorical paintings; even the ſculptor in his limited province would do well to acquire a correctneſs of deſign with a perfect knowlege of the muſcles of animals. But the painter ſhould have all this and more; he ſhould be acquainted with all their various tints, their manner of living, their peculiar motions or attitudes, and their places of abode *, or he will fall into manifeſt errors.

* That great artiſt, Mr. *Ridinger*, of *Auſburg*, exceeds all others in the three laſt particulars; nothing can equal his prints of animals for propriety of attitudes, for a juſt idea of their way of life, and for the beautiful and natural ſcenery that accompanies them. His fineſt works are, his *Wilde Thiere*, *Kleine Thiere*, and *Jagdbare Thiere*; but there are ſcarce any of his performances that can fail giving pleaſure to all admirers of nature repreſented as herſelf.

Plurimus inde labor tabulas imitando juvabit
Egregias, operumque typos, ſed plura docebit
*Natura ante oculos præſens*, nam firmat et auget
Vim genii, ex illâque artem experientia complet *.

Deſcriptive poetry is ſtill more indebted to natural knowlege, than either painting or ſculpture: the poet has the whole creation for his range; nor can his art exiſt without borrowing metaphors, alluſions, or deſcriptions from the face of nature, which is the only fund of great ideas. The depths of the ſeas, the internal caverns of the earth, and the planetary ſyſtem are out of the painter's reach; but can ſupply the poet with the ſublimeſt conceptions: nor is the knowlege of animals and vegetables leſs requiſite, while his creative pen adds life and motion to every object.

From hence it may be eaſily inferred, that an acquaintance with the works of nature is equally neceſſary to form a genuine and correct taſte for any of the above mentioned arts. Taſte is no more than a quick ſenſibility of imagination refined by judgement, and corrected by experience; but experience is another term for knowlege †, and to judge of natural images, we muſt acquire the ſame knowlege, and by the ſame means as the painter, the poet, or the ſculptor.

* *Freſnoy de arte graph. lin.* 537.

† See the Eſſay on the origin of our ideas of the ſublime and beautiful.

Thus far natural hiſtory in general ſeems connected with the polite arts; but were we to deſcend into all its particular uſes in common life, we ſhould exceed the bounds of a preface: it will be therefore neceſſary to confine our inquiries to the inveſtigation of a ſingle part of the material world, which few are ſo ignorant as not to know is divided into the animal, vegetable, and foſſil kingdoms.

Vaſt would be the extent of the inquiries into each of theſe; but though ambition may tempt us to pervade the whole field of ſcience, yet a little experience will open to our views the immenſe tracts of natural knowlege, and we ſhall find it an arduous taſk only to inveſtigate a ſingle province, ſo as to ſpeak with preciſion and certainty; without which there can be no real improvements in natural hiſtory.

For theſe reaſons, a partial examination of this ſcience is all that a conſiderate mind will aim at, which may perhaps be moſt naturally guided to give the preference to the moſt exalted ſubject of it.

Zoology is the nobleſt part of natural hiſtory, as it comprehends all ſenſitive beings, from reaſoning man, through every ſpecies of animal life, till it deſcends to that point where ſenſe is wholly extinct, and vegetation commences: and certainly none will deny, that life, and voluntary motion are ſuperior to a mere vegetating principle, or the more inactive ſtate of the foſſil kingdom.

Should

Should we follow the train of reflections which naturally ariſe from the contemplation of animals, they would ſwell this preface into a volume: and ſhould we only mention the various uſes of *Britiſh* animals in common life, yet even theſe would greatly exceed the bounds to which we have thought it right to limit ourſelves. The knowlege of *Diætetics* is a neceſſary branch of medicine, as by a proper attention to that article, an obſtinate diſtemper may be eradicated, when common remedies have failed; but this can never be attained, without the ſtudy of Zoology, which aſſiſts us greatly in learning the different qualities of animal food; and how far a difference of nutriment may contribute to cure the diſeaſe.

Cloathing is eſſential, not only to our comfort, but ſubſiſtence; and the number of our manufactures, relative to this ſingle article, demand our care for their extenſion and improvement; eſpecially as the maintenance of thouſands depends on theſe important branches of commerce; yet theſe may be enlarged, by diſcovering new properties in animals, or by the farther cultivation of thoſe already diſcovered. The ſcience of Zoology is requiſite for each of theſe; and if we reflect but a little on the unwearied diligence of our rivals the *French*, we ſhould attend to every ſiſter ſcience that may any ways preſerve our ſuperiority in manufactures and commerce.

Domeſtic

Domeſtic œconomy is an object of equal conſequence; and the author* of the *Calendar* of *Flora* has eſtabliſhed the uſes of Zoology in this particular, with undeniable evidence. This excellent writer has united a happy invention, with the moſt ſolid judgment, and certainly merits the higheſt commendations, as a friend of human kind. Our ingenious countryman, and worthy friend, the late Mr. *Stillingfleet*, in the ſame year purſued almoſt the ſame plan as far as his time would permit, with equal ſucceſs, and manifeſtly proved the utility of the project, in a learned diſcourſe prefixed to his work †.

If then Zoology can ſuggeſt ſo many hints towards enlarging and improving our manufactures and agriculture; we ſhall not think our time miſapplied, in offering to the publick, the NATURAL HISTORY of the *Quadrupeds* and *Birds* of GREAT BRITAIN. This compilation had its peculiar difficulties; but the labor of travelling through a dry arrangement of the ſubject, was very frequently alleviated by the beautiful ſpecimens we met with in our progreſs: beſides, we own with pleaſure that we have been greatly aided by the lovers of natural hiſtory, who ſince the appearance of the firſt edition have contributed to enrich the preſent with ſeveral valuable obſervations; by collecting

* *Alex. Mal. Berger.*

† *Swediſh* Tracts, tranſlated from the *Amæn. Acad.* ſecond edition.

and

and digeſting theſe materials, we have not only rendered the work more complete, but are alſo encouraged to trace the *Britiſh Zoology* through ſome of the remaining claſſes.

Let therefore every merit that may appear in the preſent edition, and every error that may have been ſuppreſſed from the former, be attributed to the kind informations we have received from our learned and ingenious friends; among whom we are ambitious of naming the Honorable *Daines Barrington*; the Reverend Sir *John Cullum*, Baronet; the Reverend Mr. *George Aſhby*, and the Reverend Mr. *Green* of *Cambridge*; *William Conſtable*, Eſquire; *Joſeph Banks*, Eſquire; the late *Benjamin Stillingfleet*, Eſquire; *Thomas Falconer*, Eſquire, of *Cheſter*; Doctor *John Reinold Forſter*; the Reverend Doctor *Buckworth*; the Reverend Mr. *Hugh Davies*, of *Beaumaris*; Mr. *Travis*, Surgeon, of *Scarborough*; Mr. *Latham*, Surgeon, of *Dartford*; *Thomas Tofield*, of *Yorkſhire*, Eſquire; Mr. *Plymly*, of *Longnor*, *Shropſhire*; *Owen Holland*, Eſquire, of *Conway*; *Henry Seymer*, Eſquire, of *Hanford*, *Wilts*; Doctor *Lyſons*, of *Gloceſter*; Doctor *Solander*; the late Mr. *Peter Collinſon*; the Reverend Mr. *White*, of *Selborn*, *Hants*; and that Father of *Britiſh* Ornithologiſts, the late Mr. *George Edwards*, of the College of Phyſicians.

In the proſecution of our plan, we ſhall, to avoid the perplexity ariſing from forming a new ſyſtem, adopt (as far

far as relates to the *Quadrupeds* and *Birds*) that of the ineſtimable *Ray*, who advanced the ſtudy of nature far beyond all that went before him; and whoſe abilities, integrity, and mildneſs, were no leſs an ornament to the human ſpecies in general, than to his own country in particular. Yet, as this excellent man was in a manner the founder of ſyſtematic Zoology, ſo later diſcoveries have made a few improvements on his labors: wherever then, he is miſtaken in the arrangement, we ſhall attempt a reform, aſſiſted by the more modern ſyſtems, all of which owe their riſe to the plan chalked out by our illuſtrious countryman. It is unneceſſary to detain the reader in this place with the reaſons for our deviation from the order we obſerved in our laſt edition, for they are given at large in the Prefaces to our *Synopſis of Quadrupeds* and *Genera of Birds* *.

We have, in our deſcriptions, wholly omitted the anatomy of animals; as that part, unleſs executed with the greateſt ſkill, would be no ſmall blemiſh to the reſt of this performance; but the reader may judge of the extent of our plan, by the following heads: the character of the genus ſhall firſt be mentioned: then the ſpecific name: the ſynonyms from different authors; and the genera in which thoſe authors have placed the animal. The names ſhall be

* Printed at *Edinburgh*, 1773.

given

given in ſeveral *European* languages*; and we ſhall conclude with a brief, but ſufficient deſcription, adding at the ſame time, the various uſes, and natural hiſtory of each individual.

If this plan ſucceeds, in promoting the knowlege of nature in this kingdom, we ſhall think ourſelves amply rewarded. Could our exhortations avail, we ſhould recommend this ſtudy moſt earneſtly to every country gentleman. To thoſe of an active turn, we might ſay, that ſo pleaſing and uſeful an employment would relieve the *tædium* ariſing from a ſameneſs of diverſions; every object would produce ſome new obſervation, and while they might ſeem only to gratify themſelves with a preſent indulgence, they would be laying up a fund of uſeful knowlege; they would find their ideas ſenſibly enlarged, till they comprehended the whole of domeſtic œconomy, and the wiſe order of Providence.

To thoſe of a ſedentary diſpoſition, this ſtudy would not only prove agreeable, but ſalutary: men of that turn of

* In the ornithology the *European* names are prefixed to the author referred to in the ſynonyms,

| | | |
|---|---|---|
| *Italian* | to | Aldrovand, Olina, or Zinanni. |
| *French* | | Briſſon, or de Buffon. |
| *German* | | Geſner, or Kramer. |
| *Swediſh* | | the Fauna Suecica. |
| *Daniſh* and *Norwegian* | | Brunnich. |
| *Carniolan* | | Scopoli. |

mind are with difficulty drawn from their books, to partake of the neceſſary enjoyments of air and exerciſe; and even when thus compelled, they profit leſs by it than men of an illiberal education. But this inconvenience would be remedied, could we induce them to obſerve and reliſh the wonders of nature; aided by philoſophy, they would find in the woods and fields a ſeries of objects, that would give to exerciſe charms unknown before; and enraptured with the ſcene, they will be ready to exclame with the poet:

> On every thorn, delightful wiſdom grows;
> In every rill, a ſweet inſtruction flows. YOUNG.

Thus would the contemplative naturaliſt learn from all he ſaw, to love his Creator for his goodneſs; to repoſe an implicit confidence in his wiſdom; and to revere his awful omnipotence. We ſhall dwell no longer on this ſubject, than to draw this important concluſion; that health of body, and a chearful contentment of mind, are the general effects of theſe amuſements. The latter is produced by a ſerious and pleaſing inveſtigation of the bounties of an all-wiſe and beneficent Providence; as conſtant and regular exerciſe is the beſt preſervative of the former.

DOWNING,
March 1. 1776.

*THOMAS PENNANT.*

# EXPLANATION of REFERENCES.

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*Cat. Carol.* Nat. Hiſt. of *Carolina* and the *Bahama* Iſlands, by *Mark Cateſby*, 2 vol. fol. *London*, 1731.

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*Cluſ. ex.* *Caroli Cluſii* Exoticorum Libri X. fol. *Antverpiæ*, 1605.

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*Egede's Greenl.* Deſcription of *Greenland*, by *Hans Egede*, Miſſionary in that Country for twenty Years. Tranſlated from the *Daniſh*, 8vo. *London*, 1745.

*Edw.* Nat. Hiſt. of Birds and other rare and undeſcribed Animals, by *George Edwards*, 7 vol. 4to. *London*, 1743, &c.

*Faun. Suec.* *Caroli Linnæi* Fauna Suecica, ſiſtens Animalia *Sueciæ* Regni, 8vo. *Holmiæ*, 1761.

*Friſch.* A Hiſtory of the Birds of *Germany*, with colored Plates, and Deſcriptions in the *German* Language, 2 vol. fol. by *John Leonard Friſch.* Printed at *Berlin*, 1734, &c.

GESNER QUAD. *Conrad. Geſneri* Hiſtoria Quadrupedum, fol. *Frankfort*, 1603.

GESNER AV. *Geſner* de Avium Natura, fol. *Francofurti*, 1585.

*Geſner icon.* Icones Animalium Quadr. vivip. & ovip. quæ in Hiſt. Animalium *Conradi Geſneri* Libri I. & II. deſcribuntur, fol. *Tiguri*, 1560.

*Girald. Cam.* Itinerarium *Cambriæ*, Auctore *Sil. Giraldo Cambrenſe*, cum Annot. *Poveli*, 12mo. *Londini*, 1585.

*Grew's muſ.* Catalogue of the Rarities belonging to the Royal Society, by Dr. *N. Grew*, fol. *London*, 1685.

*Gunner.* Det *Trondhiemſte* Gelſkabs Skrifter. *Kiobenthavn*, 1761.

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*Hiſt. d'Oiſ.* Hiſtoire Naturelle des Oiſeaux.

This is a continuation of the Natural Hiſtory by M. *de Buffon*; and is to be included in five *quarto* volumes. Three only at this time are publiſhed. The two firſt volumes are the joint performances of M. *de Buffon* and M. *Monbeillard*; the remaining three will be written by the laſt.

*Hor. Ice.* Nat. Hiſt. of *Iceland*, by *N. Horrebow.* Tranſlated from the *Daniſh*, fol. *London*, 1758.

*Jonſton's Nat. Hiſt.* *Johannis Jonſtoni*, M. D. Hiſtoria Naturalis, 2 tom. fol. *Amſtelodami*, 1657.

*Klein quad.* *Jac. Theod. Klein* Quadrupedum Diſpoſitio, breviſque Hiſt. Nat. 4to. *Lipſiæ*, 1751.

*Klein av.* *J. Theod. Klein* Hiſtoriæ Avium Prodromus, 4to. *Lubecæ*, 1750.

*Klein ſtem.* *J. Theod. Klein* Stemmata avium, 40 Tabulis Æneis ornata, 4to. *Lipſiæ*, 1759.

*Kramer.* *Gulielmi Henrici Kramer* Elenchus Vegetabilium & Animalium per *Auſtriam Inferiorem* obſervatorum, 8vo. *Viennæ*, *Pragæ* & *Tergeſti*, 1756.

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| LIN. SYST. | *Caroli Linnæi* Syſtema Naturæ, edit. 12, reformata, 8vo. *Holmiæ*, 1766. |
| *Marten's Spitzberg.* | Voyage into *Spitzbergen* and *Greenland*, by *Fred. Marten*. *London*, 1694. |
| *Martin's Weſt. Iſles.* | Deſcription of the Weſtern Iſlands of *Scotland*, by *M. Martin*, 2d edit. 8vo. *London*, 1716. |
| *Martin's St. Kilda.* | Voyage to *St. Kilda*, by *M. Martin*, 4th edit. 8vo. *London*, 1753. |
| *Merret pinax.* | Pinax Rerum Naturalium Britannicarum, Authore *Chriſtoph. Merret*, 12mo. *Londini*, 1667. |
| *Meyer's an.* | A Work wrote in *German*, containing 200 colored Plates of various Animals, with the Skeleton of each, by *John-Daniel Meyer*, Miniature Painter, at *Nuremberg*, 2 vol. fol. 1748. |
| *Morton's Northampt.* | Hiſt. Nat. of *Northamptonſhire*, by *John Morton*, A. M. fol. *London*, 1712. |
| *Nov. Com. Petrop.* | Novi Commentarii Academiæ Scientiarium imperialis *Petropolitanæ*, 7 tom. 4to. *Petropoli*, 1750, &c. |
| *Olina.* | Uccelliera overo Diſcorſo della Natura e Proprieta di diverſi Uccelli e in particolare di que'che Cantano. Opera di *Gio. Petro Olina*, fol. in *Roma*, 1684. |
| *Plin. Nat. Hiſt.* | *Plinii* Hiſtoria Naturalis, cum Notis *Harduini*, 2 tom. fol. *Paris*, 1723. |
| *Pl. Enl.* | Colored Figures of Birds, Reptiles and Inſects, publiſhing at *Paris*, under the Title of *Planches Enluminées*. |
| *Pontoppidan.* | Nat. Hiſt. of *Norway*, by the Right Reverend *Eric Pontoppidan*, Biſhop of *Bergen*. Tranſlated from the *Daniſh*, fol. *London*, 1755. |
| *Proſp. Alpin.* | *Proſperi Alpini* Hiſtoriæ *Ægypti* Pars prima & ſecunda, 2 tom. 4to. *Lugd. Bat.* 1735. |
| RAII SYN. QUAD. | *Raii* Synopſis methodica Anim. Quadrupedum & Serpentini Generis, 8vo. *Londini*, 1693. |
| RAII SYN. AV. | *Raii* Synopſis methodica Avium & Piſcium, 8vo. *London*, 1713. |

*Ruſſel's*

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| *Ruſſel's Alep.* | The Natural Hiſtory of *Aleppo* and the Parts adjacent, by *Alexander Ruſſel*, M. D. 4to. *London*, 1756. |
| SCOPOLI. | Annus. I. Hiſtorico-Naturalis, *Johannis Antonii Scopoli. Lipſiæ*, 1769. |
| *Sib. Muſ.* | *Alberti Sebæ* Rerum Naturalium Theſaurus, 4 tom. fol. *Amſterdam*, 1734, &c. |
| *Sib. Scot.* | Prodromus Hiſtoriæ Naturalis Scotiæ, Auctore *Roberto Sibbaldo*, M. D. Eq. Aur. fol. *Edinburgi*, 1684. |
| *Sib. Hiſt. Fife.* | Hiſtory of the Sheriffdoms of *Fife* and *Kinroſs*, by Sir *Robert Sibbald. Edinburgh*, fol. 1710. |
| *Smith's Kerry.* | Natural and Civil Hiſtory of the County of *Kerry*, 8vo. *Dublin*, 1756. |
| *Syn. Quad.* | Synopſis of Quadrupeds, containing Deſcriptions of 292 Animals, with 31 Plates, 8vo. 1771. by *Thomas Pennant*, Eſquire. |
| *Turner.* | Avium præcipuarum quarum apud *Plinium* & *Ariſtotelem* Mentio eſt, brevis & ſuccincta Hiſtoria, per Dm. *Gulielmum Turnerum*, Artium & Medicinæ Doctorem, 12mo. *Coloniæ*, 1544. *N. B.* This Book is not paged. |
| WIL. ORN. | The Ornithology of Mr. *Francis Willughby*; publiſhed by Mr. *Ray*, fol. *London*, 1678. |
| *Worm. Muſ.* | Muſeum Wormianum, fol. *Amſtelodami*, 1655. |
| *Zinanni.* | Delle uova e dei Nidi degli Uccelli, Libro primo del Conte *Giuſeppe Zinanni*, in *Venezia*, 1737. |

# CLASS I.

# QUADRUPEDS.

# CLASS I.

## QUADRUPEDS.

DIV. I. HOOFED.
II. DIGITATED.
III. PINNATED.
IV. WINGED.

### DIV. I. SECT. I. WHOLE HOOFED.

GENUS
I. HORSE.

### SECT. II. CLOVEN HOOFED.

II. OX.
III. SHEEP.
IV. GOAT.
V. DEER.
VI. HOG.

## Div. II. DIGITATED.

Sect. I. With large canine teeth, ſeparated from the cutting teeth.

Six cutting teeth in each jaw.

Rapacious, carnivorous.

Genus

VII. DOG.
VIII. CAT.
IX. BADGER.
X. WEESEL.
XI. OTTER.

Sect. II. With only two cutting teeth in each jaw.

Uſually herbivorous, frugivorous.

XII. HARE.
XIII. SQUIRREL.
XIV. DORMOUSE.
XV. RAT.
XVI. SHREW.
XVII. MOLE.
XVIII. URCHIN.

## Div. III. PINNATED.

Genus

XIX. SEAL.

## Div. IV. WINGED.

XX. BAT.

# ERRATA.

Page 10, line 3, *for* infect *read* infest. P. 13, note, *for* maritima *read* lanceolata. P. 21, note, *for Stanley read Stavely*. P. 39, l. 7, *for* were *read* are. *Ibid.* l. 8, *for* agreed *read* agree. P. 65, l. 14, *for* out ricks *read* oat ricks. *Ibid.* l. 18, *for* our *read* other. P. 90, l. 22, *for* ſecond ſatire fourth book *read* fourth ſatire ſecond book. P. 91. l. 17, *for Boadicid read Boadicea*. P. 93, l. 18, *for* œconomy nature *read* œconomy of nature. P. 102, *running title, for* NORWAY RAT *read* BROWN RAT. P. 112, l. 8, *for* Europæus *read* Europæa. P. 120, l. 8, *for* tectis *read* rectis. P. 141, l. 8, *for* falcon *read* falco. P. 145, *running title, for* RINGTAIL *read* BLACK. *Ibid.* l. 78, *for* deer makes foreſts, &c. *read* foreſts; and makes, &c. P. 149, *running title, for* ERNE *read* CINEREOUS. P. 154, l. 16, *for* fuſcis *read* faſciis. P. 155, l. 1, *for* tips, all *read* tips of all. P. 159, l. 14, *after* twenty-ſeven *add* inches. P. 164, l. 10, *dele (the male)*. P. 169, l. 8, *for* fine *read* five. P. 172, *after the character of the genus add* EARED OWLS. P. 173, *dele* EARED OWLS. P. 189, l. 5, *for* illice *read* ilice. P. 190, note, *for Melolantha read Melolontha*. *Ibid. for Roſel read Rœſel*. P. 201, *dele* note, † lib. X. c. 9. P. 206, l. 2, *for* clifts *read* clefts. P. 214, l. 4, *for* diſturb *read* diſturbed. P. 223, l. 8, *for* Cocque *read* Coq. P. 224, 225, *running title,* WOOD GROUS. P. 229, 230, *running title,* RED GROUS. P. 234, l. 17, *for* Sâr *read* Jâr. P. 242, l. 17, *for* quarts *read* pints. P. 243, l. 1, *for* canne patiere *read* petiere. P. 249, l. 5, *for* is *read* was. P. 277, l. 8, *for* Sparrow *read* Bunting. P. 278, l. 11, *for* breaſt *read* belly. P. 297, l. 7, *for* atri capilla *read* atricapilla. P. 325, l. 8, *dele* ? P. 339, l. 7, *for* breed *read* breeder. P. 341, l. 17, *for Indian read Indian* air, &c. P. 342, l. 15, *for* monographics *read* monographies. *Ibid.* l. 20, *for* tribes *read* tribe. P. 365, l. *penult, for Sweeden read Sweden*. P. 376, l. 11, *for* pair *read* pairs. P. 388, l. 3, *for* ſuch as employed *read* ſuch as are, &c. P. 408, *laſt line, for* table *read* tables. *Ibid. dele* preceding this claſs. P. 433, l. 22, *for* houſe *read* holes. P. 445, l. 6, *for* above knee *read* above the knee. P. 460, l. 12, *for* Larus Minuta *read* Sterna Minuta. P. 464, l. 18, *for* unctious *read* unctuous. P. 475, note, *for* Knat *read* Gnat. P. 513, l. 19, *for* bill *read* eyes. P. 524, l. 18, *dele* ) *and place it in the preceding line after* ſuſpects. P. 535, l. 16, *for* one *read* the. P. 547, l. 8, *for* fleetneſe *read* fleetneſs. *Ibid.* l. 15, *for* at time *read* at the time. P. 548, l. 7, *for* cartamea *read* carta mea. P. 554, note †, *for* let flutter *read* let it flutter. *For* Hiſt. d' Oyſ. *read* Hiſt. d' Oiſ. *paſſim*.

THE Book-binder is requeſted to place the Plates according to the numbers affixed to the figures which refer to the deſcriptions.

# PLATES

TO

# BRITISH ZOOLOGY.

## VOL. I. QUARTO.

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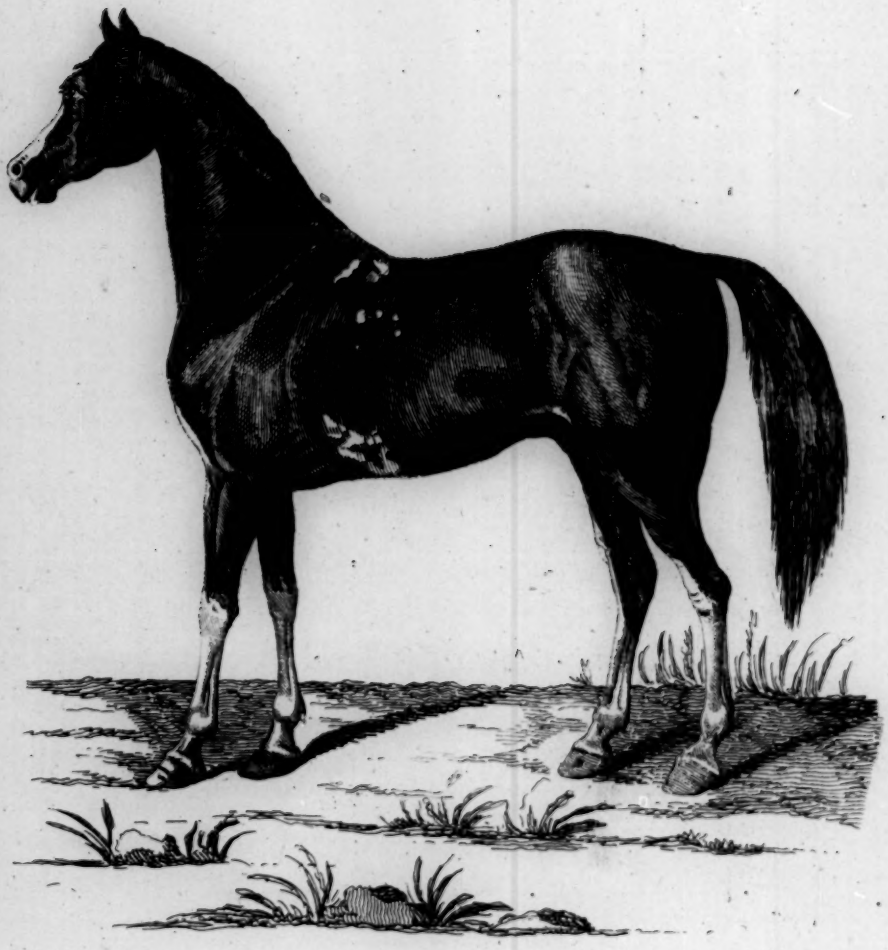


# CLASS I.

# QUADRUPEDS.

## DIV. I. HOOFED.

### SECT. I. WHOLE HOOFED.

### II. CLOVEN HOOFED.

## SECT. I.

Hoof conſiſting of one piece.
Six cutting teeth in each jaw.

I. HORSE.

*Raii ſyn. quad.* 62.
*Merret pinax.* 166.
*Geſn. quad.* 404.
*Klein quad.* 4.
*De Buffon* iv. 174.

Equus auriculis brevibus erectis, juba longa. *Briſſon quad.* 69.
Eq. Caballus. *Lin. ſyſt.* 100.
Eq. cauda undique ſetoſa. *Faun. Suec.* 47.
*Br. Zool.* 1. *Syn. quad.* No. 1.

1. GENEROUS.

| | HORSE. | MARE. | GELDING. |
|---|---|---|---|
| *Brit.* | March, Ceffyl | Caſeg | Diſpaiddfarch |
| *Fren.* | Le Cheval | La Cavale, Jument | Cheval ongre |
| *Ital.* | Cavallo | Cavalla | |
| *Span.* | Cavallo | Yegua | |
| *Port.* | Cavallo | Egoa | |
| *Germ.* | Pferd | Stut, Motſch | |
| *Dut.* | Paerd, Hengſt | Merrie | |
| *Swed.* | Hæſt | Stood, Horſs | |
| *Dan.* | Hæſt, Oeg, Hingſt | Stod-Hæſt, Hoppe | |

THE breed of horſes in *Great Britain* is as mixed as that of its inhabitants: The frequent introduction of foreign horſes has given us a variety, that no ſingle country can boaſt of: moſt other kingdoms produce only one kind,

while ours, by a judicious mixture of the ſeveral ſpecies, by the happy difference of our ſoils, and by our ſuperior ſkill in management, may triumph over the reſt of *Europe*, in having brought each quality of this noble animal to the higheſt perfection.

SWIFTNESS. In the annals of *Newmarket*, may be found inſtances of horſes that have literally out-ſtripped the wind, as the celebrated *M. Condamine* has lately ſhewn in his remarks* on thoſe of *Great Britain*. *Childers*† is an amazing inſtance of rapidity, his ſpeed having been more than once exerted equal to 82½ feet in a ſecond, or near a mile in a minute: The ſame horſe has alſo run the round courſe at *Newmarket*, (which is about 400 yards leſs than 4 miles) in ſix minutes and forty ſeconds; in which caſe his fleetneſs is to that of the ſwifteſt *Barb*, as four to three; the former, according to Doctor *Maty*'s computation, covering at every bound a ſpace of ground equal in length to twenty-three feet royal, the latter only that of eighteen feet and a half royal.

Horſes of this kind, derive their origin from *Arabia*; the ſeat of the pureſt, and moſt generous breed.‡

The ſpecies uſed in hunting, is a happy combination of the former with others ſuperior in ſtrength, but inferior in point of ſpeed and lineage: an union of both is neceſſary; for the fatigues of the chace muſt be ſupported by the ſpirit of the one, as well as by the vigor of the other.

* In his tour to Italy, 190.

† M. *Condamine* illuſtrates his remarks with the horſe, *Starling*; but the report of his ſpeed being doubtful, we chuſe to inſtance the ſpeed of *Childers*, as indiſputable and univerſally known.

‡ For a particular account of the *Arabian* horſes, the reader is referred to No. I. in the Appendix to this volume.

No

No country can bring a parallel to the ſtrength and ſize of our horſes deſtined for the draught; or to the activity and ſtrength united of thoſe that form our cavalry.

STRENGTH.

In our capital there are inſtances of ſingle horſes that are able to draw on a plain, for a ſmall ſpace, the weight of three tuns; but could with eaſe, and for a continuance draw half that weight*. The pack-horſes of *Yorkſhire*, employed in conveying the manufactures of that county to the moſt remote parts of the kingdom, uſually carry a burden of 420 pounds; and that indifferently over the higheſt hills of the north, as well as the moſt level roads; but the moſt remarkable proof of the ſtrength of our *Britiſh* horſes, is to be drawn from that of our mill-horſes: ſome of theſe will carry at one load thirteen meaſures, which at a moderate computation of 70 pounds each, will amount to 910; a weight ſuperior to that which the leſſer ſort of camels will bear: this will appear leſs ſurpriſing, as theſe horſes are by degrees accuſtomed to the weight; and the diſtance they travel no greater than to and from the adjacent hamlets.

BRITISH CAVALRY.

Our cavalry in the late campaigns, (when they had opportunity) ſhewed over thoſe of our allies, as well as of the *French*, a great ſuperiority both of ſtrength and activity: the enemy was broken through by the impetuous charge of our ſquadrons; while the *German* horſes, from their great weight, and inactive make, were unable to ſecond our efforts; though thoſe troops were actuated by the nobleſt ardor.

* *Hollingſhed* makes it a matter of boaſt, that in his time, five horſes could draw with eaſe for a long journey 3000lb. weight.

ANTIENT. The preſent cavalry of this iſland only ſupports its antient glory; it was eminent in the earlieſt times: our ſcythed * chariots, and the activity † and good diſcipline of our horſes, even ſtruck terror into *Cæſar*'s legions: and the *Britains*, as ſoon as they became civilized enough to coin, took care to repreſent on their money the animal for which they were ſo celebrated. It is now impoſſible to trace out this ſpecies; for thoſe which exiſt among the *indigenæ* of *Great Britain*, ſuch as the little horſes of *Wales* and *Cornwal*, the hobbies of *Ireland*, and the ſhelties of *Scotland*, though admirably well adapted to the uſes of thoſe countries, could never have been equal to the work of war; but probably we had even then a larger and ſtronger breed in the more fertile and luxuriant parts of the iſland. Thoſe we employ for that purpoſe, or for the draught, are an offſpring of the *German* or *Flemiſh* breed, meliorated by our ſoil, and a judicious culture.

The *Engliſh* were ever attentive to an exact culture of theſe animals; and in very early times ſet a high value on their breed. The eſteem that our horſes were held in by foreigners ſo long ago as the reign of *Athelſtan*, may be collected from a law of that monarch prohibiting their exportation, except they were deſigned as preſents. Theſe muſt have been the native kind, or the prohibition would have been needleſs, for our commerce was at that time too limited to receive improvement from any but the *German* kind, to which country their own breed could be of no value.

But when our intercourſe with the other parts of *Europe* was enlarged, we ſoon layed hold of the advantages this gave of improving

* *Covinos* vocant, quorum falcatis axibus utuntur. *Pomp. Mela*, lib. iii. c. 6.

† *Cæſar. Com.* lib. iv. *Strabo.* lib. iv.

our

our breed. *Roger de Beleſme*, Earl of *Shrewſbury* *, is the firſt that is on record: he introduced the *Spaniſh* ſtallions into his eſtate in *Powiſland*, from which that part of *Wales* was for many ages celebrated for a ſwift and generous race of horſes. *Giraldus Cambrenſis*, who lived in the reign of *Henry* II. takes notice of it †; and *Michael Drayton*, cotemporary with *Shakeſpear*, ſings their excellence in the ſixth part of his *Polyolbion*. This kind was probably deſtined to mount our gallant nobility, or courteous knights for feats of *Chivalry*, in the generous conteſts of the tilt-yard. From theſe ſprung, to ſpeak the language of the times, the *Flower* of *Courſers*, whoſe elegant form added charms to the rider; and whoſe activity and managed dexterity gained him the palm in that field of gallantry and romantic honor.

RACES.

Notwithſtanding my former ſuppoſition, races were known in *England* in very early times. *Fitz-Stephen*, who wrote in the days of *Henry* II. mentions the great delight that the citizens of *London* took in the diverſion. But by his words, it appears not to have been deſigned for the purpoſes of gaming, but merely to have ſprung from a generous emulation of ſhewing a ſuperior ſkill in horſemanſhip.

Races appear to have been in vogue in the reign of Queen *Elizabeth*, and to have been carried to ſuch exceſs as to injure the fortunes of the nobility. The famous *George* Earl of *Cumberland* is recorded to have waſted more of his eſtate than any of his anceſ-

* Created by *William* the *Conqueror*.

† In hæc tertia *Walliæ* portione quæ *Powiſia* dicitur ſunt equitia peroptima, et equi emiſſaria laudatiſſima, de *Hiſpanienſium* equorum generoſitate, quos olim Comes *Slopeſburiæ Robertus de Beleſme* in fines iſtos adduci curaverat, originaliter propagati. *Itin. Camb.* 222.

tors;

tors; and chiefly by his extreme love to horſe-races, tiltings, and other expenſive diverſions. It is probable that the parſimonious Queen did not approve of it; for races are not among the diverſions exhibited at *Kennelworth* by her favorite *Leiceſter*. In the following reign, were places allotted for the ſport: *Croydon* in the South, and *Garterly* in *Yorkſhire*, were celebrated courſes. *Cambden* alſo ſays, that in 1607 there were races near *York*, and the prize was a little golden bell.

Not that we deny this diverſion to be known in theſe kingdoms in earlier times; we only aſſert a different mode of it, gentlemen being then their own jockies, and riding their own horſes. Lord *Herbert* of *Cherbury* enumerates it among the ſports that gallant philoſopher thought unworthy of a man of honor. "The exerciſe, "(ſays he) I do not approve of, is running of horſes, there being "much cheating in that kind; neither do I ſee why a brave man "ſhould delight in a creature whoſe chief uſe is to help him to run "away*."

The increaſe of our inhabitants, and the extent of our manufactures, together with the former neglect of internal navigation to convey thoſe manufactures, multiplied the number of our horſes: an exceſs of wealth, before unknown in theſe iſlands, increaſed the luxury of carriages, and added to the neceſſity of an extraordinary culture of theſe animals: their high reputation abroad, has alſo

* The Life of *Edward* Lord *Herbert* of *Cherbury*, publiſhed by Mr. *Walpole*, p. 51.

*Jarvis Markham*, who wrote on the management of horſes 1599, mentions running horſes; but thoſe were only deſigned for matches between gentleman and gentleman.

made

made them a branch of commerce, and proved another cauſe of their vaſt increaſe.

As no kingdom can boaſt of parallel circumſtances, ſo none can vie with us in the number of theſe noble quadrupeds; it would be extremely difficult to gueſs at the exact amount of them, or to form a periodical account of their increaſe: the number ſeems very fluctuating: *William Fitz-Stephen* relates, that in the reign of King *Stephen*, *London* alone poured out 20,000 horſemen in the wars of thoſe times: yet we find that in the beginning of Queen *Elizabeth*'s reign*, the whole kingdom could not ſupply 2000 horſes to form our cavalry: and even in the year 1588, when the nation was in the moſt imminent danger from the *Spaniſh* invaſion, all the cavalry which the nation could then furniſh amounted only to 3000: to account for this difference we muſt imagine, that the number of horſes which took the field in *Stephen*'s reign was no more than an undiſciplined rabble; the few that appeared under the banners of *Elizabeth*, a corps well formed, and ſuch as might be oppoſed to ſo formidable an enemy as was then expected: but ſuch is their preſent increaſe, that in the late war, the number employed was 13,575; and ſuch is our improvement in the breed of horſes, that moſt of thoſe which are uſed in our waggons and carriages† of different kinds, might be applied to the ſame purpoſe: of thoſe, our capital alone employs near 22,000.

* Vide Sir *Edward Harwood*'s memorial. *Harleian Miſc.* iv. 255. The number mentioned by *Fitz-Stephens* is probably erroneous, and ought to be read 2000.

† It may be alſo obſerved, that the uſe of coaches was not introduced into *England* till the year 1564.

The

The learned M. *de Buffon* has almoſt exhauſted the ſubject of the natural hiſtory of the horſe, and the other domeſtic animals; and left very little for after writers to add. We may obſerve, that this moſt noble and uſeful quadruped is endowed with every quality that can make it ſubſervient to the uſes of mankind; and thoſe qualities appear in a more exalted, or in a leſs degree, in proportion to our various neceſſities.

Undaunted courage, added to a docility half reaſoning, is given to ſome, which fits them for military ſervices. The ſpirit and emulation ſo apparent in others, furniſh us with that ſpecies, which is admirably adapted for the courſe; or, the more noble and generous pleaſure of the chace.

Patience and perſeverance appear ſtrongly in that moſt uſeful kind deſtined to bear the burdens we impoſe on them; or that employed in the ſlavery of the draught.

Though endowed with vaſt ſtrength, and great powers, they very rarely exert either to their maſter's prejudice; but on the contrary, will endure fatigues, even to death, for our benefit. Providence has implanted in them a benevolent diſpoſition, and a fear of the human race, together with a certain conſciouſneſs of the ſervices we can render them. Moſt of the hoofed quadrupeds are domeſtic, becauſe neceſſity compels them to ſeek our protection: wild beaſts are provided with feet and claws, adapted to the forming dens and retreats from the inclemency of the weather; but the former, deſtitute of theſe advantages, are obliged to run to us for artificial ſhelter, and harveſted proviſions; as nature, in theſe climates, does not throughout the year ſupply them with neceſſary food.

But ſtill, many of our tame animals muſt by accident endure the rigor of the ſeaſon: to prevent which inconvenience, their feet (for

(for the extremities ſuffer firſt by cold) are protected by ſtrong hoofs of a horny ſubſtance.

The tail too is guarded with long buſhy hair that protects it in both extremes of weather; during the ſummer it ſerves by its pliancy and agility, to bruſh of the ſwarms of inſects, which are perpetually attempting either to ſting them, or to depoſit their eggs in the *rectum*; the ſame length of hair contributes to guard them from the cold in winter. But we, by the abſurd and cruel cuſtom of docking, a practice peculiar to our country, deprive theſe animals of both advantages: in the laſt war our cavalry ſuffered ſo much on that account, that we now ſeem ſenſible of the error, and if we may judge from ſome recent orders in reſpect to that branch of the ſervice*, it will for the future be corrected.

Thus is the horſe provided againſt the two greateſt evils he is ſubject to from the ſeaſons: his natural diſeaſes are few; but our ill uſage, or neglect, or, which is very frequent, our over care of him,

* The following remark of a noble writer on this ſubject is too ſenſible to be omitted.

'I muſt own I am not poſſeſſed with the *Engliſh* rage of cutting off all extremi-
'ties from horſes. I venture to declare I ſhould be well pleaſed if their tails, at
'leaſt a ſwitch or a nag tail, (but better if the whole) was left on. It is hardly
'credible what a difference, eſpecially at a certain ſeaſon of the year, this ſingle
'alteration would make in our cavalry, which though naturally ſuperior to all
'other I have ever ſeen, are however, long before the end of the campaign, for
'want of that natural defence againſt the flies, inferior to all: conſtantly ſweating
'and fretting at the picquet, tormented and ſtung off their meat and ſtomachs,
'miſerable and helpleſs; while the foreign cavalry bruſh off the vermin, are cool
'and at eaſe, and mend daily, inſtead of periſhing as ours do almoſt viſibly in
'the eye of the beholder.'

Method of breaking Horſes, &c. by *Henry* Earl of *Pembroke*, p. 68.

bring on a numerous train, which are often fatal. Among the diſtempers he is naturally ſubject to, are the worms, the bots, and the ſtone: the ſpecies of worms that infect him are the *lumbrici*, and *aſcarides*; both theſe reſemble thoſe found in human bodies, only larger: the bots are the *erucæ*, or caterpillars of the *oeſtrus*, or gad-fly: theſe are found both in the *rectum*, and in the ſtomach, and when in the latter bring on convulſions, that often terminate in death.

The ſtone is a diſeaſe the horſe is not frequently ſubject to; yet we have ſeen two examples of it, the one in a horſe near *High-wycombe*, that voided ſixteen *calculi*, each of an inch and a half diameter; the other was of a ſtone taken out of the bladder of a horſe, and depoſited in the cabinet of the late Dr. *Mead*; weighing eleven ounces*. Theſe ſtones are formed of ſeveral cruſts, each very ſmooth and gloſſy; their form triangular; but their edges rounded, as if by colliſion againſt each other.

The all-wiſe Creator hath finely limited the ſeveral ſervices of domeſtic animals towards the human race; and ordered that the parts of ſuch, which in their lives have been the moſt uſeful, ſhould after death contribute the leſt to our benefit. The chief uſe that the *exuviæ* of the horſe can be applied to, is for collars, traces, and other parts of the harneſs; and thus, even after death, he preſerves ſome analogy with his former employ. The hair of the mane is of uſe in making wigs; of the tail in making the bottoms of chairs, floor-cloths, and cords; and to the angler in making lines.

* *Muſeum Meadianum*, p. 261.

Aſinus, *Raii ſyn. quad.* 63.
*Geſn. quad.* 5.
*Klein. quad.* 6.
*De Buffon* iv. 377.
Equus auriculis longis flaccidis, juba brevi. *Briſſon quad.* 70.

Equus aſinus. *Lin. ſyſt.* 100.
Eq. caudæ extremitate ſetoſa cruce nigra ſuper humeros. *Faun. Suec.* 35*.
*Br. Zool.* 5. *Syn. quad.* No. 3.

2. Ass.

*Brit.* Aſyn, *fæm.* Aſen
*Fren.* L'Ane, *f.* L'Aneſſe
*Ital.* Aſino, Miccio. *f.* Miccia.
*Span.* Aſno, Borrico. *f.* Borrica.
*Port.* Aſno, Burro. *f.* Aſna, Burra.
*Germ.* Eſel
*Dut.* Eezel
*Swed.* Aſna
*Dan.* Aſen, Eſel.

THIS animal, tho' now ſo common in all parts of theſe iſlands, was entirely loſt among us during the reign of queen *Elizabeth*; *Hollingſhed* † informing us that in his time, "*our lande did yeelde no aſſes.*" But we are not to ſuppoſe ſo uſeful an animal was unknown in theſe kingdoms before that period; for mention is made of them ſo early as the time of king ‡ *Ethelred*, above four hundred years preceding; and again in the reign of ‖ *Henry* III. ſo that it muſt have been owing to ſome accident, that the race was extinct during the days of *Elizabeth*. We are not certain of the time it was again introduced, probably in the ſucceeding reign, when our intercourſe with *Spain* was renewed; in which country

* *Habitat in magnatum prædiis rarius.* Faun. Suec. 35. *edit.* 1746. We imagine that ſince that time the ſpecies is there extinct, for *Linnæus* has quite omitted it in the laſt edition of the *Fauna Suecica*.

† 109.

‡ When the price of a mule or young aſs was 12s. *Chron. precioſum*, 51.

‖ In 1217, when the *Camerarius* of St. *Alban*'s loſt two aſſes, &c. *Chr. pr.* 60.

this animal was greatly uſed, and where the ſpecies is in great perfection.

The aſs is originally a native of *Arabia*, and other parts of the *Eaſt:* a warm climate produces the largeſt and the beſt, their ſize and ſpirit declining in proportion as they advance into colder regions. "With difficulty," ſays Mr. *Adanſon*, ſpeaking of the aſſes of *Senegal*, "did I know this animal, ſo different did it appear from "thoſe of *Europe:* the hair was fine, and of a bright mouſe color, "and the black liſt that croſſes the back and ſhoulders had a good "effect. Theſe were the aſſes brought by the *Moors* from the inte-"rior parts of the country *." The migration of theſe beaſts has been very ſlow; we ſee how recent their return is in *Great Britain:* in *Sweden* they are even at preſent a ſort of rarity, nor does it appear by the laſt hiſtory of *Norway* †, that they had yet reached that country. They are at preſent naturalized in this kingdom; our climate and ſoil ſeems to agree with them; the breed is ſpread thro' all parts; and their utility is more and more experienced.

They are now introduced into many ſervices that were before allotted to horſes; which will prove of the utmoſt uſe in ſaving thoſe noble animals for worthier purpoſes. Many of our richeſt mines are in ſituations almoſt inacceſſible to horſes; but where theſe ſure-footed creatures may be employed to advantage, in conveying our mineral treaſures to their reſpective marts: we may add too, that ſince our horſes are become a conſiderable article of commerce, and bring annually great ſums into theſe kingdoms, the cultivation of

* *Voy. Senegal.* 212.

† *Pontoppidan*'s Nat. Hiſtory of *Norway*.

an

an animal that will in many caſes ſupply the place of the former, and enable us to enlarge our exports, certainly merits our attention.

The qualities of this animal are ſo well known, that we need not expatiate on them; its patience and perſeverance under labor, and its indifference in reſpect to food, need not be mentioned; any weed or thiſtle contents it: if it gives the preference to any vegetable, it is to the *Plantane*; for which we have often ſeen it neglect every other herb in the paſture. The narrow-leaved *Plantane* * is greedily eat by horſes and cows: of late years it has been greatly cultivated and ſowed with clover in North *Wales*, particularly in *Angleſea*, where the ſeed is harveſted, and thence diſperſed thro' other parts of the principality.

Mulus, *Raii ſyn. quad.* 64.
*Geſn. quad.* 702.
Aſinus biformis, *Klein. quad.* 6.
*Charlton ex.* 4.

Equus auriculis longis erectis, juba brevi. *Briſſon quad.* 71.
Equus mulus, *Lin. ſyſt.* 101.
*Faun. Suec.* 35. edit. 1.
*Br. Zool.* 6.

MULE.

*Brit.* Mul, *fæm.* Mules
*Fren.* Le Mulet
*Ital.* Mula
*Span.* Mulo
*Port.* Mula

*Germ.* Maulthier, Mauleſel
*Dut.* Muyl-Eeſel
*Swed.* Mulaſna
*Dan.* Muule, *v.* Muul-Eſel.

THIS uſeful and hardy animal is the off-ſpring of the horſe and aſs, or aſs and mare; thoſe produced between the two laſt are eſteemed the beſt, as the mule is obſerved to partake leſs of the

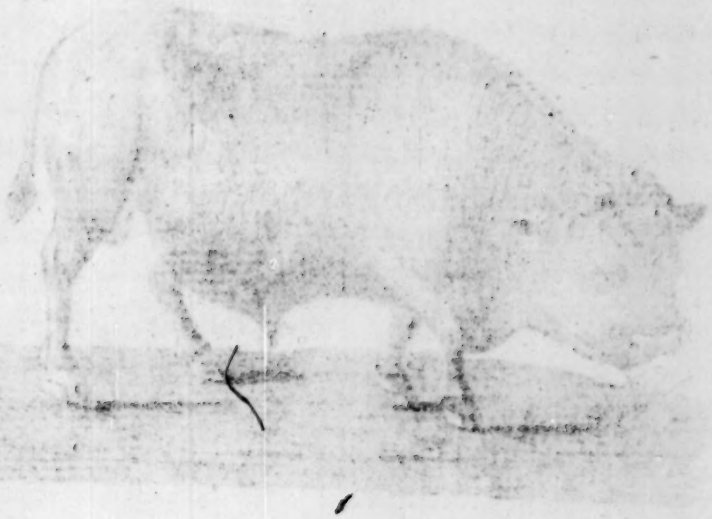
* *Plantago maritima. Fl. Angl.* 52.

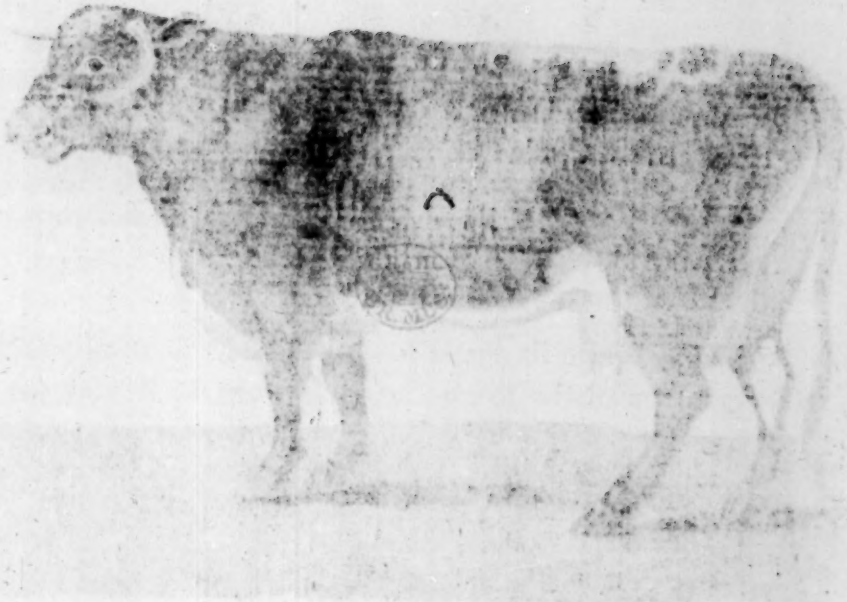
male

male than the female parent; not but they almoſt always inherit in ſome degree the obſtinacy of the parent aſs, tho' it muſt be confeſſed that this vice is heightened by their being injudiciouſly broke: inſtead of mild uſage, which gently corrects the worſt qualities, the mule is treated with cruelty from the firſt; and is ſo habituated to blows, that it is never mounted or loaded without expectation of ill treatment; ſo that the unhappy animal either prepares to retaliate, or in the terror of bad uſage, becomes invincibly retrograde. Could we prevale on our countrymen to conſider this animal in the light its uſeful qualities merit, and pay due attention to its breaking, they might with ſucceſs form it for the ſaddle, the draught, or the burden. The ſize and ſtrength of our breed is at preſent ſo improved by the importation of the *Spaniſh* male aſſes, that we ſhall ſoon have numbers that may be adapted to each of thoſe uſes. Perſons of the firſt quality in *Spain* are drawn by them; for one of which (as Mr. *Clarke* informs us*) fifty or ſixty guineas is no uncommon price; nor is it ſurprizing, if we conſider how far they excel the horſe in draught, in a mountanous country; the mule being able to tread ſecurely where the former can hardly ſtand.

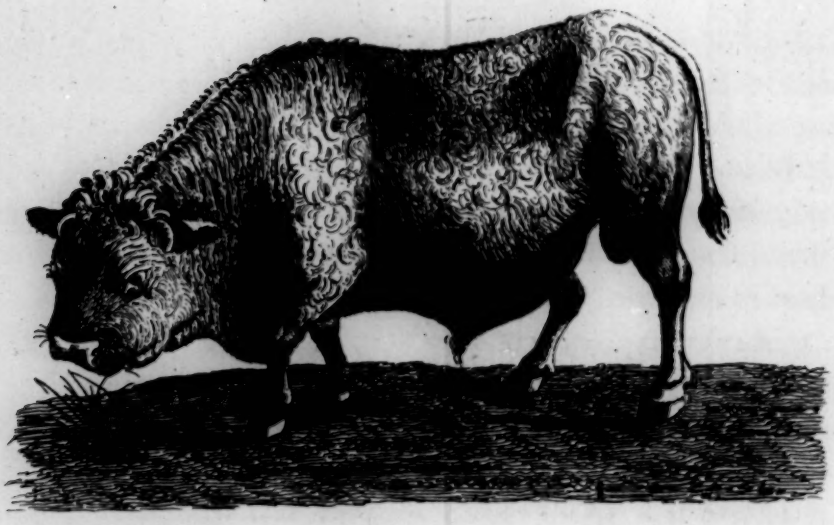
This brief account may be cloſed with the general obſervation, that neither mules nor the ſpurious offſpring of any other animal generate any farther: all theſe productions may be looked on as monſters; therefore nature, to preſerve the original ſpecies of animals entire and pure, wiſely ſtops, in inſtance of deviation, the powers of propagation.

* Letters on the *Spaniſh* nation.

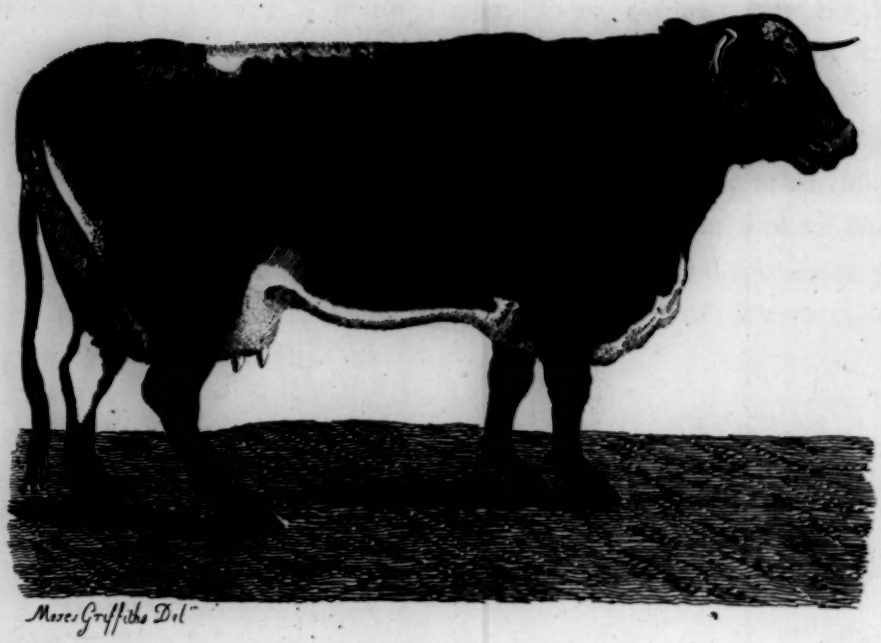




## HIGHLAND BULL.



## LANCASHIRE COW.



Moses Griffiths Del.

## DIV. I. SECT. II. CLOVEN HOOFED.

* With horns.

** Without horns.

Horns bending out laterally. II. OX.
Eight cutting teeth in the lower jaw, none in the upper.
Skin along the lower ſide of the neck pendulous.

*Raii ſyn. quad.* 70.
*Merret pinax.* 166.
*Geſn. quad.* 25, 26, 92.
Taurus domeſticus. *Klein. quad.* 10.
*Charlton ex.* 8.

Bos cornibus levibus teretibus, ſurſum reflexis. *Briſſon quad.* 52. 3. DOMESTIC.
Bos taurus. *Lin. ſyſt.* 98.
Bos cornibus teretibus flexis. *Faun. Suec.* 46. *Br. Zool.* 7. *Syn. quad.* No. 4.

| | BULL. | COW. | OX. | CALF. |
|---|---|---|---|---|
| *Brit.* | Tarw | Buwch | Ych, Eidion | Llo |
| *Fren.* | Le Taureau | La Vache | Le Bœuf | Veau |
| *Ital.* | Toro | Vacca | Bue | Vitello |
| *Span.* | Toro | Vaca | Buey | Ternera |
| *Port.* | Touro | Vaca | Boy | Vitela |
| *Germ.* | Stier | Kuh | Ochs | Kalb |
| *Dut.* | Stier, Bul | Koe | Os | Kalff |
| *Swed.* | Tiur | Ko | Noot | Kalff |
| *Dan.* | Tyr | Koe | Oxe, Stud | Kalv |

THE climate of *Great-Britain* is above all others productive of the greateſt variety and abundance of wholeſome vegetables, which, to crown our happineſs, are almoſt equally diffuſed thro' all its parts: this general fertility is owing to thoſe clouded ſkies, which foreigners miſtakenly urge as a reproach on our country; but let us

us chearfully endure a temporary gloom, which cloaths not only our meadows but our hills with the richeſt verdure. To this we owe the number, variety, and excellence of our cattle, the richneſs of our dairies, and innumerable other advantages. *Cæſar* (the earlieſt writer who deſcribes this iſland of *Great-Britain*) ſpeaks of the numbers of our cattle, and adds that we neglected tillage, but lived on milk and fleſh*. *Strabo* takes notice of our plenty of milk, but ſays we were ignorant of the art of making cheeſe†. *Mela* informs us, that the wealth of the *Britains* conſiſted in cattle: and in his account of *Ireland* reports that ſuch was the richneſs of the paſtures in that kingdom, that the cattle would even burſt if they were ſuffered to feed in them long at a time‡.

This preference of paſturage to tillage was delivered down from our *Britiſh* anceſtors to much later times; and continued equally prevalent during the whole period of our feodal government: the chieftain, whoſe power and ſafety depended on the promptneſs of his vaſſals to execute his commands, found it his intereſt to encourage thoſe employments that favoured that diſpoſition; that vaſſal, who made it his glory to fly at the firſt call to the ſtandard of his chieftain, was ſure to prefer that employ, which might be tranſacted by his family with equal ſucceſs during his abſence. Tillage would require an attendance incompatible with the ſervices he owed the baron, while the former occupation not only gave leiſure for

* *Lib.* 5. † *Lib.* 4.

‡ Adeo luxurioſa herbis non lætis modo ſed etiam dulcibus, ut ſe exigua parte diei pecora impleant, ut niſi pabulo prohibeantur, diutius paſta diffiliant. Lib. iii. c. 6.

*Hollinſhed* ſays, (but we know not on what authority,) that the *Romans* preferred the *Britiſh* cattle to thoſe of *Liguria*. *Deſc. Br.* 109.

thoſe

thoſe duties, but furniſhed the hoſpitable board of his lord with ample proviſion, of which the vaſſal was equal partaker. The reliques of the larder of the elder *Spencer* are evident proofs of the plenty of cattle in his days; for after his winter proviſions may have been ſuppoſed to have been moſtly conſumed, there were found, ſo late as the month of *May*, in ſalt, the carcaſes of not fewer than 80 beeves, 600 bacons, and 600 muttons*. The accounts of the ſeveral great feaſts in after times, afford amazing inſtances of the quantity of cattle that were conſumed in them. This was owing partly to the continued attachment of the people to grazing†; partly to the preference that the *Engliſh* at all times gave to animal food. The quantity of cattle that appear from the lateſt calculation to have been conſumed in our metropolis, is a ſufficient argument of the vaſt plenty of theſe times; particularly when we conſider the great advancement of tillage, and the numberleſs variety of proviſions, unknown to paſt ages, that are now introduced into theſe kingdoms from all parts of the world‡.

Our breed of horned cattle has in general been ſo much improved by a foreign mixture, that it is difficult to point out the original kind of theſe iſlands. Thoſe which may be ſuppoſed to have been

* *Hume*'s hiſtory of *England* ii. 153.

† *Polyd. Virgil Hiſt. Angl.* vol. i. 5. who wrote in the time of *Henry* the VIII. ſays *Angli plures pecuarii quam aratores.*

‡ That inquiſitive and accurate hiſtorian *Maitland* furniſhes us with this table of the quantity of cattle that were conſumed in *London* above 30 years ago, when that city was far leſs populous than it is at preſent.

| | | | |
|---|---|---|---|
| Beeves | 98,244. | Pigs | 52,000. |
| Calves | 194,760. | Sheep and Lambs | 711,123. |
| Hogs | 186,932. | | |

purely *Britiſh* are far inferior in ſize to thoſe on the northern part of the *European* continent: the cattle of the highlands of *Scotland* are exceeding ſmall, and many of them, males as well as females, are hornleſs: the *Welſh* runts are much larger: the black cattle of *Cornwall* are of the ſame ſize with the laſt. The large ſpecies that is now cultivated through moſt parts of *Great-Britain* are either entirely of foreign extraction, or our own improved by a croſs with the foreign kind. The *Lincolnſhire* kind derive their ſize from the *Holſtein* breed; and the large hornleſs cattle that are bred in ſome parts of *England* come originally from *Poland.*

About two hundred and fifty years ago there was found in *Scotland* a wild race of cattle, which were of a pure white color, and had (if we may credit *Boethius*) manes like lions. I cannot but give credit to the relation; having ſeen in the woods of *Drumlanrig* in *N. Britain*, and in the park belonging to *Chillingham* caſtle in *Northumberland*, herds of cattle probably derived from the ſavage breed. They have loſt their manes; but retain their color and fierceneſs: they were of a middle ſize; long leg'd; and had black muzzles, and ears: their horns fine, and with a bold and elegant bend. The keeper of thoſe at *Chillingham* ſaid, that the weight of the ox was 38 ſtones: of the cow 28: that their hides were more eſteemed by the tanners than thoſe of the tame; and they would give ſix-pence per ſtone more for them. Theſe cattle were wild as any deer: on being approached would inſtantly take to flight and galop away at full ſpeed: never mix with the tame ſpecies; nor come near the houſe unleſs conſtrained by hunger in very ſevere weather. When it is neceſſary to kill any they are always ſhot: if the keeper only wounds the beaſt, he muſt take care to keep behind ſome tree, or his life would be in danger from the furious attacks

attacks of the animal; which will never deſiſt till a period is put to its life.

Frequent mention is made of our ſavage cattle by hiſtorians. One relates that *Robert Bruce* was (in chacing theſe animals) preſerved from the rage of a wild Bull by the intrepidity of one of his courtiers, from which he and his lineage acquired the name of *Turn-Bull*. *Fitz-Stephen** names theſe animals *(Uri-Sylveſtres)* among thoſe that harbored in the great foreſt that in his time lay adjacent to *London*. Another enumerates among the proviſions at the great feaſt of *Nevil* † archbiſhop of *York*, ſix wild Bulls; and *Sibbald* aſſures us that in his days a wild and white ſpecies was found in the mountains of *Scotland*, but agreeing in form with the common ſort. I believe theſe to have been the *Biſontes jubati* of *Pliny* found then in *Germany*, and might have been common to the continent and our iſland: the loſs of their ſavage vigor by confinement might occaſion ſome change in the external appearance, as is frequent with wild animals deprived of liberty; and to that we may aſcribe their loſs of mane. The *Urus* of the *Hercynian* foreſt deſcribed by *Cæſar*, book VI. was of this kind, the ſame which is called by the modern *Germans*, *Aurochs*, i. e. Bos ſylveſtris ‡.

The ox is the only horned animal in theſe iſlands that will apply his ſtrength to the ſervice of mankind. It is now generally allowed, that in many caſes oxen are more profitable in the draught

* A Monk who lived in the reign of *Henry* II. and wrote a Hiſtory of *London*, preſerved in *Leland's itin.* VIII.

† *Leland's Collectanea.* vi.

‡ *Geſner Quad.* 144. In *Fitz-Stephen*, *Urus* is printed *Urſus*.

than horſes; their food, harneſs, and ſhoes being cheaper, and ſhould they be lamed or grow old, an old working beaſt will be as good meat, and fatten as well as a young one.

There is ſcarce any part of this animal without its uſe. The blood, fat, marrow, hide, hair, horns, hoofs, milk, creme, butter, cheeſe, whey, urine, liver, gall, ſpleen, bones, and dung, have each their particular uſe in manufactures, commerce and medicine.

The ſkin has been of great uſe in all ages. The antient *Britains*, before they knew a better method, built their boats with oſiers, and covered them with the hides of bulls, which ſerved for ſhort * coaſting voyages.

Primum cana ſalix madefacto vimine parvam
Texitur in Puppim, cæſoque induta juvenco,
Vectoris patiens, tumidum ſuper emicat amnem:
Sic *Venetus* ſtagnante *Pado*, fuſoque *Britannus*
Navigat oceano. *Lucan.* lib. iv. 131.

The bending willow into barks they twine;
Then line the work with ſpoils of ſlaughter'd kine.
Such are the floats *Venetian* fiſhers know,
Where in dull marſhes ſtands the ſettling *Po*;
On ſuch to neighboring *Gaul*, allured by gain,
The bolder *Britons* croſs the ſwelling main. *Rowe.*

* That theſe *vitilia navigia*, as *Pliny* calls them, were not made for long voyages, is evident not only from their ſtructure, but from the account given by *Solinus*, that the crew never eat during the time they were at ſea. *Vide C. Junii Solini polyhiſtor.* 56.

Veſſels

Veſſels of this kind are ſtill in uſe on the *Iriſh* lakes; and on the *Dee* and *Severn:* in *Ireland* they are called *Curach*, in *England Coracles*, from the *Britiſh Cwrwgl*, a word ſignifying a boat of that ſtructure.

At preſent, the hide, when tanned and curried, ſerves for boots, ſhoes, and numberleſs other conveniences of life.

Vellum is made of calves ſkin, and goldbeaters ſkin is made of a thin vellum, or a finer part of the ox's guts. The hair mixed with lime is a neceſſary article in building. Of the horns are made combs, boxes, handles for knives, and drinking veſſels; and when ſoftened by water, obeying the manufacturer's hand, they are formed into pellucid laminæ for the ſides of lanthorns. Theſe laſt conveniences we owe to our great king *Alfred*, who firſt invented them to preſerve his candle time meaſurers, from the wind*; or (as other writers will have it) the tapers that were ſet up before the reliques in the miſerable tattered churches of that time †.

In medicine, the horns were employed as alexipharmics or antidotes againſt poiſon, the plague, or the ſmall-pox; they have been dignified with the title of *Engliſh bezoar*; and are ſaid to have been found to anſwer the end of the oriental kind: the chips of the hoofs, and paring of the raw hides, ſerve to make carpenters glue.

The bones are uſed by mechanics, where ivory is too expenſive; by which the common people are ſerved with many neat conveniencies at an eaſy rate. From the *tibia* and *carpus* bones is procured an oil much uſed by coach-makers and others in dreſſing and cleaning harneſs, and all trappings belonging to a coach; and the bones

* *Anderſon's hiſt. commerce*, I. 45.

† *Stanley's hiſt. of churches*, 103.

calcined,

calcined, afford a fit matter for teſts for the uſe of the refiner in the ſmelting trade.

The blood is uſed as an excellent manure for fruit trees *; and is the baſis of that fine color, the *Pruſſian* blue.

The fat, tallow, and ſuet, furniſh us with light; and are alſo uſed to precipitate the ſalt that is drawn from briny ſprings. The gall, liver, ſpleen and urine, have alſo their place in the *materia medica*.

The uſes of butter, cheeſe, creme and milk, in domeſtic œconomy; and the excellence of the latter, in furniſhing a palatable nutriment for moſt people, whoſe organs of digeſtion are weakened, are too obvious to be inſiſted on.

* *Evelyn's* phil. diſc. of earth, p. 319..

Horns

Horns twiſted ſpirally, and pointing outwards. III. SHEEP.
Eight cutting teeth in the lower jaw, none in the upper.

Ovis, *Raii ſyn. quad.* 73.
*Geſn. quad.* 71.
Ovis aries, ovis anglica mutica cauda ſcrotoque ad genua pendulis. *Lin. ſyſt.* 97.
Ovis cornibus compreſſis lunatis. *Faun. Suec.* 45.
Aries, &c. *Klein. quad.* 13.
Aries laniger cauda rotunda brevi *Briſſon quad.* 48.
*De Buffon.* v. 1. *tab.* 1, 2.
*Br. Zool.* 10. *Syn. quad.* No. 8.

4. FLEECY.

| | MALE. | FEMALE. | LAMB. |
|---|---|---|---|
| *Brit.* | Hwrd. Maharen | Dafad | Oen |
| *Fren.* | Le Belier | La brebis | L'Agneau |
| *Ital.* | Montone | Pecora | Agnello |
| *Span.* | Carnero | Oveja | Cordero |
| *Port.* | Caneiro | Ovelha | Cordeiro |
| *Germ.* | Widder | Schaaf | Lamm |
| *Dut.* | Ram | Schaep | Lam |
| *Swed.* | Wadur | Faar | Lamb |
| *Dan.* | Vædder, Være | Faar | Lam, *agna* Gimmer Lam. |

IT does not appear from any of the early writers, that the breed of this animal was cultivated for the ſake of the wool among the *Britains*; the inhabitants of the inland parts of this iſland either went entirely naked, or were only clothed with ſkins. Thoſe who lived on the ſea coaſts, and were the moſt civilized, affected the manners of the *Gauls*, and wore like them a ſort of garments made of coarſe wool, called *Brachæ*. Theſe they probably had from *Gaul*, there not being the leſt traces of manufactures among the *Britains*, in the hiſtories of thoſe times.

On

On the coins or money of the *Britains* are ſeen impreſſed the figures of the horſe, the bull and the hog, the marks of the tributes exacted from them by the conquerors *. The Reverend Mr. *Pegge* was ſo kind as to inform me that he has ſeen on the coins of *Cunobelin* that of a ſheep. Since that is the caſe, it is probable that our anceſtors were poſſeſſed of the animal, but made no farther uſe of it than to ſtrip off the ſkin, and wrap themſelves in it, and with the wool inmoſt, obtain a comfortable protection againſt the cold of the winter ſeaſon.

This neglect of manufacture, may be eaſily accounted for, in an uncivilized nation whoſe wants were few, and thoſe eaſily ſatisfied; but what is more ſurpriſing, when after a long period we had cultivated a breed of ſheep, whoſe fleeces were ſuperior to thoſe of other countries; we ſtill neglected to promote a woollen manufacture at home. That valuable branch of buſineſs lay for a conſiderable time in foreign hands; and we were obliged to import the cloth manufactured from our own materials. There ſeems indeed to have been many unavailing efforts made by our monarchs to preſerve both the wool and the manufacture of it among ourſelves: *Henry* the ſecond, by a patent granted to the weavers in *London*, directed that if any cloth was found made of a mixture of *Spaniſh* wool, it ſhould be burnt by the mayor †: yet ſo little did the weaving buſineſs advance, that *Edward* the third was obliged to permit the importation of foreign cloth in the beginning of his reign; but ſoon after, by encouraging foreign artificers to ſettle in *England*, and inſtruct the natives in their trade, the manufac-

* *Cambden.* 1. Preface. cxiii.

† *Stow* 419.

ture

ture increaſed ſo greatly as to enable him to prohibit the wear of foreign cloth. Yet, to ſhew the uncommercial genius of the people, the effects of this prohibition were checked by another law, as prejudicial to trade as the former was ſalutary; this was an act of the ſame reign, againſt exporting woollen goods manufactured at home, under heavy penalties; while the exportation of wool was not only allowed but encouraged. This overſight was not ſoon rectified, for it appears that, on the alliance that *Edward* the fourth made with the king of *Arragon*, he preſented the latter with ſome ewes and rams of the *Coteſwold* kind; which is a proof of their excellency, ſince they were thought acceptable to a monarch, whoſe dominions were ſo noted for the fineneſs of their fleeces *.

In the firſt year of *Richard* the third, and in the two ſucceeding reigns, our woollen manufactures received ſome improvements †; but the grand riſe of all its proſperity is to be dated from the reign of queen *Elizabeth*, when the tyranny of the duke of *Alva* in the *Netherlands* drove numbers of artificers for refuge into this country, who were the founders of that immenſe manufacture we carry on at preſent. We have ſtrong inducements to be more particular on the modern ſtate of our woollen manufactures; but we deſiſt, from a fear of digreſſing too far; our enquiries muſt be limited to points that have a more immediate reference to the ſtudy of *Zoology*.

No country is better ſupplied with materials, and thoſe adapted

* *Rapin* i. 605. in the note. *Stow's Annales*, 696.

† In that of *Richard*, two-yard cloths were firſt made. In that of *Henry* the VIII. an *Italian* taught us the uſe of the diſtaff. Kerſies were alſo firſt made in *England* about that time.

to every ſpecies of the clothing buſineſs, than *Great-Britain*; and though the ſheep of theſe iſlands afford fleeces of different degrees of goodneſs, yet there are not any but what may be uſed in ſome branch of it. *Herefordſhire*, *Devonſhire*, and *Coteſwold downs* are noted for producing ſheep with remarkbly fine fleeces; the *Lincolnſhire* and *Warwickſhire* kind, which are very large, exceed any for the quantity and goodneſs of their wool. The former county yields the largeſt ſheep in theſe iſlands, where it is no uncommon thing to give fifty guineas for a ram, and a guinea for the admiſſion of a ewe to one of the valuable males; or twenty guineas for the uſe of it for a certain number of ewes during one ſeaſon. *Suffolk* alſo breeds a very valuable kind. The fleeces of the northern parts of this kingdom are inferior in fineneſs to thoſe of the ſouth; but ſtill are of great value in different branches of our manufactures. The *Yorkſhire* hills furniſh the looms of that county with large quantities of wool; and that which is taken from the neck and ſhoulders, is uſed (mixed with *Spaniſh* wool) in ſome of their fineſt cloths.

*Wales* yields but a coarſe wool; yet it is of more extenſive uſe than the fineſt *Segovian* fleeces; for rich and poor, age and youth, health and infirmities, all confeſs the univerſal benefit of the flannel manufacture.

The ſheep of *Ireland* vary like thoſe of *Great-Britain*. Thoſe of the ſouth and eaſt being large, and their fleſh rank. Thoſe of the north, and the mountainous parts ſmall, and their fleſh ſweet. The fleeces in the ſame manner differ in degrees of value.

*Scotland* breeds a ſmall kind, and their fleeces are coarſe. *Sibbald* (after *Boethius*) ſpeaks of a breed in the iſle of *Rona*, covered with blue wool; of another kind in the iſle of *Hirta*, larger than the biggeſt he goat, with tails hanging almoſt to the ground, and horns

as

as thick, and longer than thoſe of an ox*. He mentions another kind, which is clothed with a mixture of wool and hair; and a fourth ſpecies, whoſe fleſh and fleeces are yellow, and their teeth of the colour of gold; but the truth of theſe relations ought to be enquired into, as no other writer has mentioned them, except the credulous *Boethius*. Yet the laſt particular is not to be rejected: for notwithſtanding I cannot inſtance the teeth of ſheep, yet I ſaw in the ſummer of 1772, at *Athol* houſe, the jaws of an ox, with teeth thickly incruſted with a gold colored *pyrites*; and the ſame might have happened to thoſe of ſheep had they fed in the ſame grounds, which were in the valley beneath the houſe.

Beſides the fleece, there is ſcarce any part of this animal but what is uſeful to mankind. The fleſh is a delicate and wholeſome food. The ſkin dreſſed, forms different parts of our apparel; and is uſed for covers of books. The entrails, properly prepared and twiſted, ſerve for ſtrings for various muſical inſtruments. The bones calcined (like other bones in general) form materials for teſts for the refiner. The milk is thicker than that of cows; and conſequently

* *Gmelin* deſcribes an animal he found in *Siberia*, that in many particulars agrees with this; he calls it *Rupicapra cornubus arietinis*; *Linnæus* ſtyles it *Capra ammon. Syſt.* 97. and *Geſner*, p. 934. imagines it to be the *Muſimon* of the antients; the horns of the *Siberian* animal are two yards long, their weight above thirty pounds. As we have ſo good authority for the exiſtence of ſuch a quadruped, we might venture to give credit to *Boethius*'s account, that the ſame kind was once found in *Hirta:* but having thrice within theſe few years had opportunity of examining the *Muſimon*, we found that both in the form of the horns, and the ſhortneſs of the tail, it had the greateſt agreement with the goat, in which *genus* we have placed it No. 11. of our *Synopſis*, with the trivial name of *Siberian*.

yields a greater quantity of butter and cheeſe; and in ſome places is ſo rich, that it will not produce the cheeſe without a mixture of water to make it part from the whey. The dung is a remarkably rich manure; inſomuch that the folding of ſheep is become too uſeful a branch of huſbandry for the farmer to neglect. To conclude, whether we conſider the advantages that reſult from this animal to individuals in particular, or to theſe kingdoms in general, we may with *Columella* conſider this in one ſenſe, as the firſt of the domeſtic animals. *Poſt majores quadrupedes ovilli pecoris ſecunda ratio eſt; quæ prima ſit ſi ad utilitatis magnitudinem referas. Nam id præcipue contra frigoris violentiam protegit, corporibuſque noſtris liberaliora præbet velamina; et etiam elegantium menſas jucundis et numeroſis dapibus exornat* *.

The ſheep as to its nature, is a moſt innocent, mild and ſimple animal; and conſcious of its own defenceleſs ſtate, remarkably timid: if attacked when attended by its lamb, it will make ſome ſhew of defence, by ſtamping with its feet, and puſhing with its head: it is a gregarious animal, is fond of any jingling noiſe, for which reaſon the leader of the flock has in many places a bell hung round its neck, which the others will conſtantly follow: it is ſubject to many diſeaſes: ſome ariſe from inſects which depoſite their eggs in different parts of the animal; others are cauſed by their being kept in wet paſtures; for as the ſheep requires but little drink, it is naturally fond of a dry ſoil. The dropſy, vertigo (the *pendro* of the Welſh) the pthiſick, jaundice, and worms in the liver † annually make great havoke among our flocks: for the firſt

* *De re ruſtica, lib.* vii. *c.* 2.

† Faſciola hepatica, *Lin. ſyſt.* 648.

diſeaſe,

diſeaſe, the ſhepherd finds a remedy by turning the infected into fields of broom; which plant has been alſo found to be very efficacious in the ſame diſorder among the human ſpecies.

The ſheep is alſo infeſted by different ſorts of inſects: like the horſe it has its peculiar *Oeſtrus* or *Gadfly*, which depoſits its eggs above the noſe in the frontal ſinuſes; when thoſe turn into maggots they become exceſſive painful, and cauſe thoſe violent agitations that we ſo often ſee the animal in. The *French* ſhepherds make a common practice of eaſing the ſheep, by trepanning and taking out the maggot; this practice is ſometimes uſed by the *Engliſh* ſhepherds, but not always with the ſame ſucceſs: beſides theſe inſects, the ſheep is troubled with a kind of tick and louſe, which magpies and ſtarlings contribute to eaſe it of, by lighting on its back, and picking the inſects off.

IV. GOAT. Horns bending backwards and almoſt cloſe at their baſe.
Eight cutting teeth in the upper jaw, none in the lower.
Male generally bearded.

5. Domestic.

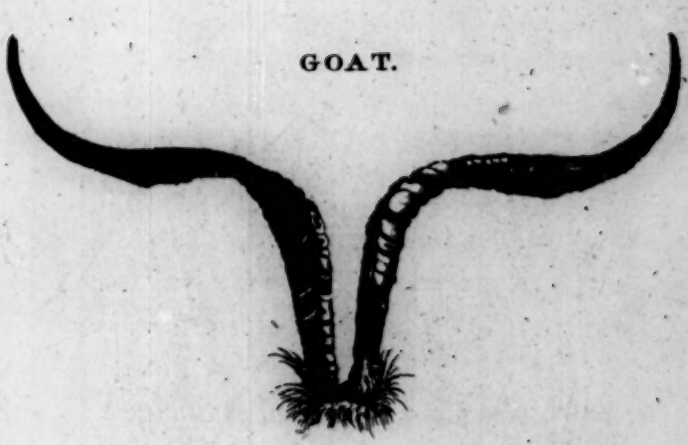
*Raii ſyn. quad.* 77.
*Meyer's an.* i. *Tab.* 68.
*Charlton ex.* 9.
*Klein quad.* 15.
*Geſn. quad.* 266. 268.
*De Buffon.* v. 59. *Tab.* 8. 9.

Hircus cornibus interius cultratis, exterius rotundatis, infra carinatis, arcuatis. *Briſſon quad.* 38.
Capra Hircus, *Lin ſyſt.* 94.
Capra cornibus carinatis arcuatis, *Faun. Suec.* 44.
*Br. Zool.* 13. *Syn. quad* p. 14.

| | Male. | Female. | Kid. |
|---|---|---|---|
| *Brit.* | Bwch | Gafr | Mynn |
| *Fren.* | Le Bouc | La Chevre | Chevreau |
| *Ital.* | Becco | Capra | Capretto |
| *Span.* | Cabron | Cabra | Cabrito |
| *Port.* | Cabram | Cabra | Cabrito |
| *Germ.* | Bock | Geiſz | Bocklein |
| *Dut.* | Bok | Giyt | |
| *Swed.* | Bock | Geet | Kiidh |
| *Dan.* | Buk, Geedebuk | Geed | Kid |

THE goat is the moſt local of any of our domeſtic animals, confining itſelf to the mountanous parts of theſe iſlands: his moſt beloved food is the tops of the boughs, or the tender bark of young trees; on which account he is ſo prejudicial to plantations, that it would be imprudent to draw him from his native rocks, except ſome method could be thought on to obviate this evil. We have been informed, that there is a freeholder in the pariſh of *Trawſvynnyd*, in *Merionethſhire*, who hath, for ſeveral years paſt, broke

# GOAT.



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broke the the teeth of his goats ſhort off with a pair of pincers, to preſerve his trees. This practice has certainly efficacy ſufficient to prevent the miſchief, and may be recommended to thoſe who keep them for their ſingularity; but ought by no means to be encouraged, when thoſe animals are preſerved for the ſake of their milk, as the great ſalubrity of that medicine ariſes from their promiſcuous feeding.

This quadruped contributes in various inſtances to the neceſſities of human life; as food, as phyſick, and as cloathing: the whiteſt wigs are made of its hair; for which purpoſe that of the he-goat is moſt in requeſt; the whiteſt and cleareſt is ſelected from that which grows on the haunches, where it is longeſt and thickeſt; a good ſkin well haired is ſold for a guinea; though a ſkin of bad hue, and ſo yellow as to baffle the barber's ſkill to bleach, will not fetch above eighteen-pence, or two ſhillings.

The *Welch* goats are far ſuperior in ſize, and in length and fineneſs of hair, to thoſe of other mountanous countries. Their uſual color is white: thoſe of *France* and the *Alps* are ſhort-haired, reddiſh, and their horns ſmall. We have ſeen the horns of a *Cambrian* he-goat three feet two inches long, and three feet from tip to tip.

The ſuet of the goat is in great eſteem, as well as the hair. Many of the inhabitants of *Caernarvonſhire* ſuffer theſe animals to run wild on the rocks during winter as well as ſummer; and kill them in *October*, for the ſake of their fat, either by ſhooting them with bullets, or running them down with dogs like deer. The goats killed for this purpoſe, are about four or five years old. Their ſuet will make candles, far ſuperior in whiteneſs and goodneſs to thoſe made from that of the ſheep or the ox, and accordingly brings a much greater price in the market: nor are the horns without

out their uſe, the country people making of them excellent handles for tucks and penknives. The ſkin is peculiarly well adapted for the glove manufactory, eſpecially that of the kid: abroad it is dreſſed and made into ſtockings, bed-ticks, bolſters *, bed-hangings, ſheets, and even ſhirts. In the army it covers the horſeman's arms, and carries the foot-ſoldier's proviſions. As it takes a dye better than any other ſkin, it was formerly much uſed for hangings in the houſes of people of fortune, being ſuſceptible of the richeſt colors; and when flowered and ornamented with gold and ſilver, became an elegant and ſuperb furniture.

The fleſh is of great uſe to the inhabitants of the country where it reſides; and affords them a cheap and plentiful proviſion in the winter months, when the kids are brought to market. The haunches of the goat are frequently ſalted and dried, and ſupply all the uſes of bacon: this by the natives is called *Coch yr wden*, or hung veniſon.

The meat of a ſplayed goat of ſix or ſeven years old, (which is called *Hyfr)* is reckoned the beſt; being generally very ſweet and fat. This makes an excellent paſty; goes under the name of rock veniſon, and is little inferior to that of the deer. Thus nature provides even on the tops of high and craggy mountains, not only neceſſaries, but delicacies for the inhabitants.

The milk of the goat is ſweet, nouriſhing and medicinal: it is an excellent ſuccedaneum for aſs's milk; and has (with a tea-ſpoon-

* Bolſters made of the hair of a goat were in uſe in the days of *Saul*; as appears from I. *Samuel*, c. 19. v. 13. The ſpecies very probably was the *Angora* goat, which is only found in the *Eaſt*, and whoſe ſoft and ſilky hair ſupplied a moſt luxurious couch. *Vide Syn. quad.* p. 15.

ful

ful of hartſhorn drank warm in bed in the morning, and at four o'clock in the afternoon, and repeated for ſome time) been a cure for pthiſical people, before they were gone too far. In ſome of the mountanous parts of *Scotland* and *Ireland*, the milk is made into whey; which has done wonders in this and other caſes, where coolers and reſtoratives are neceſſary: and to many of thoſe places, there is a great reſort of patients of all ranks, as there is in *England* to the *Spaws* or *Baths*. It is not ſurprizing that the milk of this animal is ſo ſalutary, as it brouzes only on the tops, tendrils and flowers of the mountain ſhrubs, and medicinal herbs; rejecting the groſſer parts. The blood of the he-goat dried, is a great recipe in ſome families for the pleuriſy and inflammatory diſorders *.

Cheeſe made of goats milk, is much valued in ſome of our mountanous countries, when kept to proper age; but has a peculiar taſte and flavor.

The rutting ſeaſon of theſe animals, is from the beginning of *September* to *November*; at that time the males drive whole flocks of the females continually from place to place, and fill the whole atmoſphere around them with their ſtrong and ungrateful odor; which though as diſagreeable as aſſa fœtida itſelf, yet may be conducive to prevent many diſtempers, and to cure nervous and hyſterical ones. Horſes are imagined to be much refreſhed with it; on which account many perſons keep a he-goat in their ſtuds or ſtables.

Goats go with young four months and a half, and bring forth from the latter end of *February* to the latter end of *April:* Having

* This remedy is taken notice of even by Dr. *Mead* in his *monita medica*, p. 35. under the article *pleuritis*. The *Germans* uſe that of the *Stein-boc*, or *Ibex*.

only two teats, they bear generally but two young, and ſometimes three; and in good warm paſtures there have been inſtances, though rare, of their bringing four at a time: both young and old are affected by the weather: a rainy ſeaſon makes them thin; a dry ſunny one makes them fat and blythe: their exceſſive venery prevents longævity, for they ſeldom live in our climate above eleven or twelve years.

Theſe animals with amazing ſwiftneſs and ſafety, climb up the moſt rugged rocks, and aſcend the moſt dangerous places: they can ſtand unmoved on the higheſt precipices, and ſo balance their centre of gravity, as to fix themſelves in ſuch ſituations with ſecurity and firmneſs; ſo that we ſeldom hear of their falling, or breaking their necks. When two are yoked together, as is frequently practiſed, they will, as if by conſent, take large and hazardous leaps; yet ſo well time their mutual efforts, as rarely to miſcarry in the attempt.

The origin of the domeſtic goat is the *Stein-boc*, *Ibex* or wild goat, *Syn. quad.* No. 9. a ſpecies now found only in the *Alps*, and in *Crete*.

Horns

Horns upright, ſolid, branched, annually deciduous. V. DEER.
Eight cutting teeth in the lower jaw, none in the upper.

Red Deer, Stag or Hart. Cervus *Raii ſyn. quad.* 84.
*Charlt. ex.* 11.
*Meyer's an.* Tab. 22.
*Geſner quad.* 326.
*Grew's Muſeum*, 21.
*De Buffon*, Tom. vi. 63. Tab. 9, 10.

Cervus cornibus teretibus ad latera incurvis. *Briſſon quad.* 58.
Cervus Elaphus. *Lin. ſyſt.* 93.
C. cornibus ramoſis teretibus recurvatis. *Faun. Suec.* 40.
C. nobilis. *Klein. quad.* 23.
*Br. Zool.* 15. *Syn. quad.* No. 38.

6. STAG.

| STAG. | HIND. | YOUNG, or CALF. |
|---|---|---|
| *Brit.* Carw | Ewig | Elain |
| *Fren.* Le Cerf | La Biche | Faon |
| *Ital.* Cervio | Cervia | |
| *Span.* Ciervo | Cierva | |
| *Port.* Cervo | Cerva | |
| *Germ.* Hirtz, Hirſch | Hind | Hinde kalb |
| *Dutch*, Hart | Hinde | |
| *Swed.* Hiort, Kronhiort | Hind | |
| *Dan.* Kronhiort | Hind | Kid, or Hind kalv |

Platycerata. *Plinii*, lib. xi. c. 37.
Eurycerata. *Oppian Cyneg.* lib. 11. lin. 293.
Fallow deer, or buck; cervus platyceros. *Raii ſyn. quad.* 85.
Dama vulgaris. *Geſner quad.* 307.
*Meyer's an.* Tom. i. Tab. 71.
*De Buffon.* Tom. vi. 161. Tab. 27, 28.

Cervus cornuum unica et altiore ſummitate palmata. *Briſſon quad.* 62.
Cervus dama. Cervus cornibus ramoſis recurvatis compreſſis: ſummitatibus palmatis. *Lin. ſyſt.* 93. *Faun. Suec.* 42. *Br. Zool.* 15. *Syn. quad.* No. 37.
Cervus palmatus. *Klein. quad.* 25.

7. FALLOW.

| BUCK. | DOE. | FAWN. |
|---|---|---|
| *Brit.* Hydd | Hyddes | Elain |
| *Fren.* Le Dain | La Daine | Faon |
| *Ital.* Daino | | Cerbiatto |
| *Span.* Gamo, Corza | | Venadito |
| *Port.* Corza | | Veado |
| *Germ.* Damhirſch | | |
| *Swed.* Dof, Dof hiort | | |
| *Dan.* Daae Dijr | | |

AT firſt, the beaſts of chace had this whole iſland for their range; they knew no other limits than that of the ocean;

nor confeſſed any particular maſter. When the *Saxons* had eſtabliſhed themſelves in the *Heptarchy*, they were reſerved by each ſovereign for his own particular diverſion: hunting and war in thoſe uncivilized ages were the only employ of the great; their active, but uncultivated minds, being ſuſceptible of no pleaſures but thoſe of a violent kind, ſuch as gave exerciſe to their bodies, and prevented the pain of thinking.

But as the *Saxon* kings only appropriated thoſe lands to the uſe of foreſts which were unoccupied; ſo no individuals received any injury: but when the conqueſt had ſettled the *Norman* line on the throne, this paſſion for the chace was carried to an exceſs, which involved every civil right in a general ruin: it ſuperſeded the conſideration of religion even in a ſuperſtitious age: the village communities, nay, even the moſt ſacred edifices were turned into one vaſt waſte, to make room for animals, the objects of a lawleſs tyrant's pleaſure. The new foreſt in *Hampſhire* is too trite an inſtance to be dwelt on: ſanguinary laws were enacted to preſerve the game; and in the reigns of *William Rufus*, and *Henry* the firſt, it was leſs criminal to deſtroy one of the human ſpecies than a beaſt of chaſe*. Thus it continued while the *Norman* line filled the throne; but when the *Saxon* line was reſtored under *Henry* the ſecond, the rigor of the foreſt laws was immediately ſoftened.

When our barons began to form a power, they clamed a vaſt, but more limited tract for a diverſion that the *Engliſh* were always fond of. They were very jealous of any encroachments on their reſpective bounds, which were often the cauſe of deadly feuds:

* An antient hiſtorian ſpeaks thus of the penalties incurred; *Si cervum aut aprum oculos eis evellebat; amavit enim feras tanquam erat pater earum. M. Paris.* 11.

ſuch

ſuch a one gave cauſe to the fatal day of *Chevy-chace*, a fact, which though recorded only in a ballad, may, from what we know of the manners of the times, be founded on truth; not that it was attended with all the circumſtances the author of that natural, but heroic compoſition hath given it, for on that day neither a *Percy* nor a *Douglas* fell: here the poet ſeems to have clamed his privilege, and mixed with this fray ſome of the events of the battle of *Otterbourne*.

When property became happily more divided by the relaxation of the feodal tenures, theſe extenſive hunting-grounds became more limited; and as tillage and huſbandry increaſed, the beaſts of chace were obliged to give way to others more uſeful to the community. The vaſt tracts of land before dedicated to hunting, were then contracted; and in proportion as the uſeful arts gained ground, either loſt their original deſtination, or gave riſe to the invention of *Parks*. Liberty and the arts ſeem coeval, for when once the latter got footing, the former protected the labors of the induſtrious from being ruined by the licentiouſneſs of the ſportſman, or being devoured by the objects of his diverſion: for this reaſon, the ſubjects of a deſpotic government ſtill experience the inconveniences of vaſt waſtes, and foreſts, the terrors of the neighbouring huſbandmen*; while in our well-regulated monarchy, very few chaces remain: we ſtill indulge ourſelves in the generous pleaſure of hunting, but confine the deer-kind to parks, of which *England* boaſts of more than any other kingdom in *Europe*. Our equal laws allow every man his pleaſure; but confine them in ſuch bounds, as prevents

* In *Germany* the peaſants are often obliged to watch their grounds the whole night, to preſerve the fences and corn from being deſtroyed by the deer.

them

them from being injurious to the meaneſt of the community. Before the reformation, our prelates ſeem to have guarded ſufficiently againſt the want of this amuſement, the ſee of *Norwich* in particular, being poſſeſſed about that time of thirteen parks *. They ſeem to have forgot good king *Edgar*'s advice, *Docemus etiam ut ſacerdos non ſit venator neque accipitrarius neque potator, ſed incumbat ſuis libris ſicut ordinem ipſius decet* †.

It was cuſtomary to ſalt the veniſon for preſervation, like other meat. *Rymer* preſerves a warrant of *Edward* III. ordering ſixty deer to be killed for that purpoſe.

The ſtag and buck agree in their nature; only the latter being more tender is eaſier tamed, and made familiar. The firſt is become leſs common than it was formerly; its exceſſive vitiouſneſs during the rutting ſeaſon, and the badneſs of its fleſh, induce moſt people to part with the ſpecies. Stags are ſtill found wild in the highlands of *Scotland*, in herds of four or five hundred together, ranging at full liberty over the vaſt hills of the north. Some grow to a great ſize: when I was at *Invercauld* Mr. *Farquharſon* aſſured me that he knew an inſtance of one that weighed eighteen ſtone *Scots*, or three hundred and fourteen pounds, excluſive of the entrails, head and ſkin. Formerly the great highland chieftains uſed to hunt with the magnificence of an eaſtern monarch; aſſembling four or five thouſand of their clan, who drove the deer into the toils, or to the ſtation their lairds had placed themſelves in: but as this pretence was frequently uſed to collect their vaſſals for rebellious purpoſes, an act was paſſed prohibiting any aſſemblies of this nature. Stags are likewiſe met with on the moors that border on *Cornwal*

* *Peacham's Compleat Gentleman*, 261. † *Leges Saxon.* 87.

and

and *Devonſhire*, and in *Ireland* on the mountains of *Kerry*, where they add greatly to the magnificence of the romantic ſcenery of the lake of *Killarny*.

The ſtags of *Ireland* during its uncultivated ſtate, and while it remained an almoſt boundleſs tract of foreſt, had an exact agreement in habit, with thoſe that range at preſent through the wilds of *America*. They were leſs in body, but very fat; and their horns of a ſize far ſuperior to thoſe of *Europe*, but in form agreed in all points. Old *Giraldus* ſpeaks with much preciſion of thoſe of *Ireland*, *Cervos præ nimia pinguedine minus fugere prævalentes, quanto minores ſunt corporis quantitate, tanto præcellentius efferuntur, capitis et cornuum dignitate* *.

We have in *England* two varieties of fallow-deer which are ſaid to be of foreign origin: The beautiful ſpotted kind, and the very deep brown ſort, that are now ſo common in ſeveral parts of this kingdom. Theſe were introduced here by king *James* the *firſt* out of *Norway* †, where he paſſed ſome time when he viſited his intended bride *Mary* of *Denmark* ‡. He obſerved their hardineſs; and that they could endure, even in that ſevere climate, the winter without fodder. He firſt brought ſome into *Scotland*, and from thence tranſported them into his chaces of *Enfield* and *Epping*, to

* *Topogr. Hiberniæ.* c. 19. *Lawſon* in his hiſtory of *Carolina* p. 123, mentions the fatneſs of the *American* ſtags, and their inferiority of ſize to the *European*. I have often ſeen their horns, which vaſtly exceed thoſe of our country in ſize, and number of antlers.

† This we relate on the authority of Mr. *Peter Collinſon*.

‡ One of the *Welch* names of this animal (*Gievr-danas*, or *Daniſh* goat) implies that it was brought from ſome of the *Daniſh* dominions. *Ed. Llwyd. Ph. tr.* No. 334.

be

be near his palace of *Theobalds*; for it is well known, that monarch was in one part of his character the *Nimrod* of his days, fond to exceſs of hunting, that image of war, although he deteſted the reality.

No country produces the fallow-deer in quantities equal to *England*. In *France* they are ſcarcely known, but are ſometimes found in the north * of *Europe*. In *Spain* they are extremely large. They are met with in *Greece*, the *Holy Land* †, and in *China* ‡; but in every country except our own are in a ſtate of nature, unconfined by man.

They are not natives of *America*; for the deer known in our colonies by that name are a diſtinct ſpecies, a ſort of ſtag, as we have remarked p. 51. of our *Synopſis* of quadrupeds.

The uſes of theſe animals are moſt ſimilar; the ſkin of the buck and doe is ſufficiently known to every one; and the horns of the ſtag are of great uſe in mechanics; they, as well as the horns of the reſt of the deer kind, being exceſſively compact, ſolid, hard and weighty; and make excellent handles for couteaus, knives, and ſeveral other utenſils. They abound in that ſalt, which is the baſis of the ſpirit of *Hartſhorn*; and the remains (after the ſalts are extracted) being calcined, become a valuable aſtringent in fluxes, which is known by the name of burnt *Hartſhorn*. Beſides theſe uſes in mechanics and medicine, there is an inſtance in *Giraldus Cambrenſis*, of a counteſs of *Cheſter*, who kept milch hindes, and made cheeſe of their milk, ſome of which ſhe preſented to archbiſhop *Baldwin*, in his itinerary through *Wales*, in the year 1188 ‖.

* *Pontop. Norway.* 11. 9. *Faun. Suec.* ſp. 42.

† *Haſſelquiſt. itin.* 290. ‡ *Du Halde* hiſt. *China.* I. 315.

‖ *Girald. Camb. Itin.* p. 216.

THE

Pl. IV. No. 8.

# ROEBUCK.

H. Griffith pinx. P. Mazell sc.

8. ROE.

Δορκας, *Ariſtotelis* de Part. lib. iii. c. 2.
Iorcas, Dorcas, *Oppian* Cyneg. lib. ii. lin. 296. 315.
Caprea, *Plinii*, lib. xi. c. 37.
Capreolus Vulgo. *Raii ſyn. quad.* 89.
*Camd. Brit.* ii. 771.
*Meyer's anim.* ii. Tab. 73.
Capreolus, *Sib. Scot. pars* 3. 9.
Caprea, capreolus, Dorcas. *Geſner. quad.* 296.
*Merret pinax.* 166.
Cervus cornibus teretibus erectis. *Briſſon quad.* 61.
*De Buffon*, Tom. vi. 289. *Tab.* 32, 33.
Cervus minimus, *Klein quad.* 24.
Cervus capreolus, *Lin. ſyſt.* 94.
C. Cornibus ramoſis teretibus erectis, ſummitate bifida, *Faun. Suec.* 43. *Br. Zool.* 18. *Syn. quad.* No. 43. *Tour in Scotland.* 288. *Tab.* xiv.

*Brit.* Iwrch, *fæm.* Iyrchell
*Fren.* Le Chevreuil
*Ital.* Capriolo
*Span.* Zorlito, Cabronzillo montes
*Port.* Cabra montes
*Ger.* Rehbock, *fæm.* Rehgeeſs
*Swed.* Radiur, Rabock
*Dan.* Raaedijr Raaebuk

THE roebuck prefers a mountanous woody country to a plain one; was formerly very common in *Wales*, in the north of *England*, and in *Scotland*; but at preſent the ſpecies no longer exiſts in any part of *Great-Britain*, except in the *Scottiſh* highlands. In *France* they are more frequent; they are alſo found in *Italy*, *Sweden*, and *Norway*; and in *Aſia* they are met with in *Siberia**. The firſt that are met with in *Great-Britain* are in the woods on the ſouth ſide of Loch *Rannoch*, in *Perthſhire:* the laſt in thoſe of *Langwal*, on the ſouthern borders of *Cathneſs:* but they are moſt numerous in the beautifull foreſts of *Invercauld*, in the midſt of the *Grampian* hills. They are unknown in *Ireland*.

This is the leſt of the deer kind, being only three feet nine inches long, and two feet three inches high before, and two feet ſeven behind. The weight from 50 to 60lb. The horns are from eight

* *Bell's* Travels.

to nine inches long, upright, round, and divided into only three branches; their lower part is ſulcated lengthways, and extremely rugged; of this part is made handles for couteaus, knives, &c. The horns of a young buck in its ſecond year are quite plain: in its third year a branch appears; but in the fourth its head is complete. The body is covered during winter with very long hair, well adapted to the rigor of the highland air; the lower part of each hair is aſh-color; near the ends is a narrow bar of black, and the points are yellow: The hairs on the face are black, tipped with aſh-color; the ears are long, their inſides of a pale yellow, and covered with long hair; the ſpaces bordering on the eyes and mouth are black. During ſummer its coat has a very different appearance, being very ſhort and ſmooth, and of a bright reddiſh color.

The cheſt, belly, and legs, and the inſide of the thighs, are of a yellowiſh white; the rump is of a pure white: the tail is very ſhort. On the outſide of the hind leg, below the joint, is a tuft of long hair.

The make of the roebuck is very elegant, and formed for agility. Theſe animals do not keep in herds like other deer, but only in families; they bring two fawns at a time, which the female is obliged to conceal from the buck while they are very young. The fleſh of this creature is reckoned a delicate food.

It is a tender animal, incapable of bearing great cold. *M. de Buffon* tells us that in the hard winter of 1709, the ſpecies in *Burgundy* were almoſt deſtroyed, and many years paſt before it was reſtored again. I was informed in *Scotland*, that it is very difficult to rear the fawns; it being computed that eight out of ten of thoſe that are taken from their parents die.

Wild roes during ſummer feed on graſs, and are very fond of the

*rubus*

*rubus ſaxatilis*, called in the highlands the *roebuck* berry; but in winter time, when the ground is covered with ſnow, they brouze on the tender branches of the fir and birch.

In the old *Welſh* laws, a roebuck was valued at the ſame price as a ſhe-goat; a ſtag at the price of an ox; and a fallow deer was eſteemed equal to that of a cow; or, as ſome ſay, a he-goat *.

FOSSIL HORNS.

It will not be foreign to the preſent ſubject, to mention the vaſt horns frequently found in *Ireland*, and others ſometimes met with in our own kingdom. The latter are evidently of the ſtag kind, but much ſtronger, thicker, heavier, and furniſhed with fewer antlers than thoſe of the preſent race; of thoſe ſome have been found on the ſea-coaſt of *Lancaſhire* †, and a ſingle horn was dug a few years ago out of the ſands near *Cheſter*. Thoſe found in ‡ *Ireland* muſt be referred to the elk kind, but of a ſpecies different from the *European*, being provided with brow antlers, which that wants: neither are they of the *Mooſe* deer, or *American*, which entirely agrees with the elk of *Europe*, as I have found by compariſon. Entire ſkeletons of this animal are ſometimes met with, lodged in a white marle; but more frequently beneath the turf-bogs. Not the fainteſt account (traditional or hiſtoric) is left of the exiſtence of theſe animals in our kingdom; ſo that they may poſſibly be ranked among thoſe remains which foſſiliſts diſtinguiſh by the title of diluvian.

Mr. *Graham*, factor to the *Hudſon's Bay Company*, once gave me hopes of diſcovering the living animal. He informed me that he had received accounts from the *Indians* who reſort to the factories,

* *Leges Wallicæ*, 258. † *Ph. Tr.* No. 422.

‡ No. 227. *Boate's Nat. Hiſt. Ireland*, 137.

that there is found a deer, about ſeven or eight hundred miles weſt of *York fort*, which they call *Waſkeſſeu*, and ſay is vaſtly ſuperior in ſize to the common *Mooſe*. But as yet nothing has tranſpired relating to ſo magnificent an animal. The difference of ſize between the modern *Mooſe*, and the owners of the foſſil horns may be eſtimated by the following account. The largeſt horns of the *American Mooſe* ever brought over, are only thirty-two inches long, and thirty-four between tip and tip. The length of one of the foſſil horns is ſix feet four inches. The ſpace between tip and tip near twelve feet *. The largeſt *Mooſe* deſcribed by any authentic voyager does not exceed the ſize of a great horſe; that which I ſaw (a female) was fifteen hands high. But we muſt ſearch for much larger animals to ſupport the weight of our foſſil horns. If *Joſſelyn*'s or *Dudly*'s *Mooſe* of twelve feet in height ever exiſted †, we may ſuppoſe that to have been a ſpecies, which as population advanced, retired into diſtant parts, into depths of woods unknown but to diſtant *Indians*.

* A pair of this ſize is preſerved at Sir *Patrick Bellew*'s, Bart. in the county of *Louth*. The great difference between the Mooſe horns and the Foſſil is ſhewen in Plates VII. and IX. of my *Synopſis of Quadrupeds*.

† Voy. to *New England*, 88. *New England* Rarities, 19. See alſo Mr. *Dudly*'s account in Ph. Tranſ. abridg. VII. 447.

** Without

## ** Without horns.

Divided hoofs.
Cutting teeth in both jaws.

VI. HOG.

9. COMMON.

Sus, ſeu Porcus domeſticus.
*Raii ſyn. quad.* 92.
*Geſner quad.* 872.
*Charlton ex.* 14.
Sus caudatus auriculis oblongis acutis, cauda piloſa. *Briſſon quad.* 74.
*De Buffon, Tom.* v. 99. Tab. 6. 7.
*Klein quad.* 25.
Sus ſcrofa. *Lin. ſyſt.* 102.
Sus dorſo antice ſetoſo, cauda piloſa. *Faun. Suec.* 21.
*Br. Zool.* 19. *Syn. quad.* No. 54.

| | BOAR. | SOW. | HOG. |
|---|---|---|---|
| *Brit.* | Baedd | Hwch | Mochyn |
| *Fren.* | Le Verrat | La Truye | Porc |
| *Ital.* | Verro | Porca | Porco |
| *Span.* | Berraco | Puerca | Puerco |
| *Port.* | | Porca | Porco |
| *Germ.* | Eber | Sau | Barg |
| *Dut.* | Beer | Soch | Varken |
| *Swed.* | | Swiin | |
| *Dan.* | Orne | Soë | |

ACCORDING to common appearances, the hog is certainly the moſt impure and filthy of all quadrupeds: we ſhould however reflect that filthineſs is an idea merely relative to ourſelves; but we form a partial judgment from our own ſenſations, and overlook that wiſe maxim of Providence, that every part of the creation ſhould have its reſpective inhabitants. By this œconomy of nature, the earth is never overſtocked, nor any part of the creation uſeleſs. This obſervation may be exemplified in the animal before

us;

us; the hog alone devouring what is the refuſe of all the reſt, and contributing not only to remove what would be a nuiſance to the human race, but alſo converting the moſt nauſeous offals into the richeſt nutriment: for this reaſon its ſtomach is capacious, and its gluttony exceſſive; not that its palate is inſenſible to the difference of eatables; for where it finds variety, it will reject the worſt with as diſtinguiſhing a taſte as other quadrupeds *.

This animal has (not unaptly) been compared to a miſer, who is uſeleſs and rapacious in his life, but on his death becomes of public uſe, by the very effects of his ſordid manners. The hog during life renders little ſervice to mankind, except in removing that filth which other animals reject: his more than common brutality, urges him to devour even his own off-ſpring. All other domeſtic quadrupeds ſhew ſome degree of reſpect to mankind; and even a ſort of tenderneſs for us in our helpleſs years; but this animal will devour infants, whenever it has opportunity.

The parts of this animal are finely adapted to its way of life. As its method of feeding is by turning up the earth with its noſe for roots of different kinds; ſo nature has given it a more prone form than other animals; a ſtrong brawny neck; eyes ſmall, and placed high in the head; a long ſnout, noſe callous and tough, and a quick ſenſe of ſmelling to trace out its food. Its inteſtines have a

* The ingenious author of the *Pan Suecus*, has proved this beyond contradiction, having with great induſtry drawn up tables of the number of vegetables, which each domeſtic animal chuſes, or rejects: and it is found that the hog eats but 72, and refuſes 171 plants,

| | | | |
|---|---|---|---|
| The Ox | eats 276. | rejects 218. | |
| Goat | 449. | 126. | |
| Sheep | 387. | 141. | |
| Horſe | 262. | 212. | *Amæn. Acad.* ii. 203. |

ſtrong

ſtrong reſemblance to thoſe of the human ſpecies; a circumſtance that ſhould mortify our pride. The external form of its body is very unweildy; yet, by the ſtrength of its tendons, the wild boar (which is only a variety of the common kind) is enabled to fly from the hunters with amazing agility: the back toe on the feet of this animal prevents its ſlipping while it deſcends declivities, and muſt be of ſingular uſe when purſued: yet, notwithſtanding its powers of motion, it is by nature ſtupid, inactive, and drowſy; much inclined to increaſe in fat, which is diſpoſed in a different manner from other animals, and forms a regular coat over the whole body. It is reſtleſs at a change of weather, and in certain high winds is ſo agitated as to run violently, ſcreaming horribly at the ſame time: it is fond of wallowing in the dirt, either to cool its ſurfeited body, or to deſtroy the lice, ticks, and other inſects with which it is infeſted. Its diſeaſes generally ariſe from intemperance; meaſles, impoſtumes, and ſcrophulous complaints are reckoned among them.

*Linnæus* obſerves that its fleſh is a wholeſome food for athletic conſtitutions, or thoſe that uſe much exerciſe; but bad for ſuch as lead a ſedentary life: it is though of moſt univerſal uſe, and furniſhes numberleſs materials for epicuriſm, among which brawn is a kind peculiar to *England**. The fleſh of the hog is an article of the firſt importance to a naval and commercial nation, for it takes ſalt better than any other kind, and conſequently is capable of being preſerved longer. The lard is of great uſe in medicine, being an ingredient in various ſorts of plaiſters, either pure, or in the form of pomatum; and the briſtles are formed into bruſhes of ſeveral kinds.

* *Hollingſhed Deſcr. Brit.* 109.

This

This animal has been applied to an uſe in this iſland which ſeems peculiar to *Minorca*, and the part of *Murray* which lies between the *Spey* and *Elgin*. It has been there converted into a beaſt of draught; for I have been aſſured by a miniſter of that country, eye witneſs to the fact, that he had on his firſt coming into his pariſh ſeen a cow, a ſow, and two *Trogues* (young horſes) yoked together, and drawing a plough in a light ſandy ſoil; and that the ſow was the beſt drawer of the four. In *Minorca* the aſs and the hog are common help-mates, and are yoked together in order to turn up the land.

WILD-BOAR. The wild-boar was formerly a native of our country, as appears from the laws of *Hoel dda* *, who permitted his grand huntſman to chace that animal from the middle of *November* to the beginning of *December*. *William* the Conqueror puniſhed with the loſs of their eyes, any that were convicted of killing the wild-boar, the ſtag, or the roebuck †; and *Fitz-Stephen* tells us, that the vaſt foreſt that in his time grew on the north ſide of *London*, was the retreat of ſtags, fallow-deer, wild-boars, and bulls. *Charles* I. turned out wild-boars in the *New Foreſt*, *Hampſhire*, but they were deſtroyed in the civil wars.

* *Leges Wallicæ*. 41. † *Leges Saxon*. 292.

## DIV. II. SECT. I. DIGITATED QUADRUPEDS,

With large canine teeth, ſeparated from the cutting teeth.
Six cutting teeth in each jaw.
Rapacious, carnivorous.

### VII. DOG.

Six cutting teeth, and two canine.
Five toes before, four behind.
Blunt claws. Long viſage.

10. FAITHFULL.

Canis, *Raii ſyn. quad.* 175.
*Charlton ex.* 26.
*Merret pinax*, 168.
*Geſner quad.* 160, 249, 250.
Canis domeſticus. *Briſſon quad.* 170.
*De Buffon, Tom.* v. p. 185.
*Klein quad.* 63.
Canis familiaris. *Lin. ſyſt.* 56.
Canis cauda recurva. *Faun. Suec.* 5.
*Brit. Zool.* 23. *Syn. quad.* No. 110.

*Brit.* Ci, *fæm.* Gaſt
*Fren.* Le Chien
*Ital.* Cane
*Span.* Perro
*Port.* Cam
*Germ.* Hund
*Dut.* Hond
*Swed.* Hund
*Dan.* Hund, *fæm.* Tæve

DR. *Caius*, an *Engliſh* phyſician, who flouriſhed in the reign of queen *Elizabeth*, has left among ſeveral other tracts relating to natural hiſtory, one written expreſsly on the ſpecies of *Britiſh* dogs: they were wrote for the uſe of his learned friend *Geſner*; with whom he kept a ſtrict correſpondence; and whoſe death he laments in a very elegant and pathetic manner.

Beſides a brief account of the variety of dogs then exiſting in this

country, he has added a ſyſtematic table of them: his method is ſo judicious, that we ſhall make uſe of the ſame; explain it by a brief account of each kind; and point out thoſe that are no longer in uſe among us.

## SYNOPSIS OF BRITISH DOGS.

- I. The moſt generous kinds.
  - Dogs of chace.
    - Hounds.
      - Terrier
      - Harrier
      - Blood hound
    - Gaze hound
    - Grey hound
    - Leviner, or Lyemmer
    - Tumbler
  - Fowlers.
    - Spaniel
    - Setter
    - Water ſpaniel, or finder
  - Lap Dogs.
    - Spaniel gentle, or comforter
- II. Farm Dogs.
  - Shepherd's dog
  - Maſtiff, or ban dog
- III. Mongreds.
  - Wappe
  - Turnſpit
  - Dancer.

The firſt variety is the *Terrarius* or *Terrier*, which takes its name from its ſubterraneous employ; being a ſmall kind of hound, uſed to force the fox, or other beaſts of prey, out of their holes; (and in former times) rabbets out of their burrows into nets.

The

The *Leverarius*, or *Harrier*, is a ſpecies well known at preſent; it derives its name from its uſe, that of hunting the hare; but under this head may be placed the fox-hound, which is only a ſtronger and fleeter variety, applied to a different chace*.

The *Sanguinarius*, or *Bloodhound*, or the *Sleuthounde*† of the *Scots*, was a dog of great uſe, and in high eſteem with our anceſtors: its employ was to recover any game that had eſcaped wounded from the hunter; or been killed and ſtole out of the foreſt. It was remarkable for the acuteneſs of its ſmell, tracing the loſt beaſt by the blood it had ſpilt; from whence the name is derived: This ſpecies could, with the utmoſt certainty, diſcover the thief by following his footſteps, let the diſtance of his flight be ever ſo great; and through the moſt ſecret and thickeſt coverts: nor would it ceaſe its purſuit, till it had taken the felon. They were likewiſe uſed by *Wallace* and *Bruce* during the civil wars. The poetical hiſtorians of the two heroes, frequently relate very curious paſſages on this ſubject; of the ſervice theſe dogs were of to their maſters, and the eſcapes they had from thoſe of the enemy. The bloodhound was in great requeſt on the confines of *England* and *Scotland*; where the borderers were continually preying on the herds and flocks of

* Prince *Griffith ap Conan* (who began his reign in the year 1079) divided hunting into three kinds: the firſt and nobleſt ſort was the *Helfa ddolef*, which is hunting for the melody of the cry, or notes of the pack: The ſecond ſort was the *Helfa gyfartha*, or hunting when the animal ſtood at bay: The laſt kind was the *Helfa gyffredin*, i. e. common hunting; which was no more than the right any perſon had, who happened accidentally to come in at the death of the game, to claim a ſhare. *Lewis's Hiſt. of Wales*, 56.

† From the *Saxon Slot* the impreſſion that a deer leaves of its foot in the mire, and *hund* a dog. So they derive their name from following the track.

their neighbors. The true bloodhound was large, ſtrong, muſcular, broad breaſted, of a ſtern countenance, of a deep tan-color, and generally marked with a black ſpot above each eye.

The next diviſion of this ſpecies of dogs, comprehends thoſe that hunt by the eye; and whoſe ſucceſs depends either upon the quickneſs of their ſight, their ſwiftneſs, or their ſubtility.

The *Agaſæus*, or Gazehound, was the firſt: it chaced indifferently the fox, hare, or buck. It would ſelect from the herd the fatteſt and faireſt deer; purſue it by the eye; and if loſt for a time, recover it again by its ſingular diſtinguiſhing faculty; and ſhould the beaſt rejoin the herd, this dog would fix unerringly on the ſame. This ſpecies is now loſt, or at leſt unknown to us.

It muſt be obſerved that the *Agaſæus* of Dr. *Caius*, is a very different ſpecies from the *Agaſſeus* of *Oppian*, for which it might be miſtaken from the ſimilitude of names: this he deſcribes as a ſmall kind of dog, peculiar to *Great-Britain*; and then goes on with theſe words;

Γυρὸν, ἀσαρκότατον, λασιότριχον, ὄμμασι νωθὲς.

*Curvum, macilentum, hiſpidum, oculis pigrum.*

what he adds afterwards, ſtill marks the difference more ſtrongly;

Ῥίνεσι δ' αὖτε μάλιστα πανέξοχος ἐστὶν ἀγασσεὺς.

*Naribus autem longè præſtantiſſimus eſt agaſſeus.*

From *Oppian's* whole deſcription, it is plain he meant our Beagle *.

The

* *Opp. Cyneg. lib.* i. *lin.* 473. 476.

*Nemeſianus*

The next kind is the *Leporarius*, or Gre-hound. Dr. *Caius* informs us, that it takes its name *quod præcipui gradus ſit inter canes*; the firſt in rank among dogs: that it was formerly eſteemed ſo, appears from the foreſt laws of king *Canute*; who enacted, that no one under the degree of a gentleman ſhould preſume to keep a gre-hound; and ſtill more ſtrongly from an old *Welſh* ſaying; *Wrth ei Walch, ei Farch, a'i Filgi, yr adwaenir Bonheddig:* Which ſignifies, that you may know a gentleman by his hawk, his horſe and his gre-hound.

*Froiſſart* relates a fact not much to the credit of the fidelity of this ſpecies: when that unhappy Prince *Richard* the ſecond was taken in *Flint* caſtle, his favorite gre-hound immediately deſerted him, and fawned on his rival *Bolingbroke*; as if he underſtood, and foreſaw the misfortunes of the former *. The ſtory is ſo ſingular, that we give it in the note in the words of the hiſtorian.

The

*Nemeſianus* alſo celebrates our dogs.

Diviſa *Britannia* mittit
Veloces, noſtrique orbis venantibus aptos.

* Le Roy *Richard* avoit ung levrier lequel on nommoit *Math*, tres beau levrier oultre meſure, & ne vouloit ce chien cognoiſtre nul homme hors le Roi, et quand le Roy vouloit chevaucher, celluy qui lavoit en garde le laiſſoit aller, et ce levrier venoit tantoſt devers le Roy le feſtoyer ce luy mettoient incontinent quil eſtoit eſchappé les deux pieds ſur les epaules. Et adoncques advint que le Roy et le conte *Derby* parlans enſemble en la place de la court dudit chaſteau, et leur chevaulx tous ſellez, car ils vouloient monter a cheval, ce levrier nomme *Math* qui eſtoit couſtumier de faire au Roy ce que diſt eſt, laiſſa le Roy et ſen vint au Duc *de Lenclaſtre*, et luy fiſt toutes telles contenances que paravant il avoit acouſtume de faire au Roy, et lui aſſiſt les deux pieds ſur le col, et le commenca moult grandement a cherir,

The variety called the *Highland* gre-hound, and now become very ſcarce, is of a very great ſize, ſtrong, deep cheſted, and covered with long and rough hair. This kind was much eſteemed in former days, and uſed in great numbers by the powerfull chieftains in their magnificent hunting matches. It had as ſagacious noſtrils as the *Blood hound*, and was as fierce. This ſeems to be the kind *Boethius* ſtyles, *genus venaticum cum celerrimum tum audaciſſimum: nec modo in feras, ſed in hoſtes etiam latroneſque; præſertim ſi dominum ductoremve injuriam affici cernat aut in eos concitetur.*

The third ſpecies is the *Levinarius*, or *Lorarius*; The Leviner or Lyemmer: the firſt name is derived from the lightneſs of the kind; the other from the old word *Lyemme*, a thong: this ſpecies being uſed to be led in a thong, and ſlipped at the game. Our author ſays, that this dog was a kind that hunted both by ſcent and ſight; and in the form of its body obſerved a medium between the hound, and the gre-hound. This probably is the kind now known to us by the name of the *Iriſh* gre-hound, a dog now extremely ſcarce in that kingdom, the late king of *Poland* having procured from them as many as poſſible. I have ſeen two or three in the whole iſland: they were of the kind called by *M. de Buffon*

a cherir, le duc de *Lenclaſtre* qui point ne cognoiſſoit ce levrier, demanda au Roy, et que veult ce levrier faire, couſin, diſt le Roy, ce vous eſt une grant ſignifiance & a moy petite. Comment diſt duc lentendez vous. Je lentends diſt le Roy, le levrier vous feſtoye et receult au jourdhuy comme Roy *d'Angleterre* que vous ſerez et ien ſeray depoſe, et le levrier en a cognoiſſance naturelle. Si le tenez deles vous, car il vous ſuyura et meſlongera. Le duc *de Lenclaſtre* entendit bien ceſte parolle et fiſt chere au levrier le quel oncques depuis ne voulut ſuyvre *Richard de Bourdeaulx* ſuyvit le duc *de Lenclaſtre*. *Chronicque de Froiſſart*, tom. iv. Fueillet 72. Edition de Paris, 1530.

*Le*

*Le grand Danois*, and probably imported there by the *Danes* who long poſſeſſed that kingdom. Their uſe ſeems originally to have been for the chaſe of wolves with which *Ireland* ſwarmed till the latter end of the laſt century. As ſoon as thoſe animals were extirpated, the numbers of the dogs decreaſed; for from that period, they were kept only for ſtate.

The *Vertagus*, or Tumbler, is a fourth ſpecies; which took its prey by mere ſubtility, depending neither on the ſagacity of its noſe, nor its ſwiftneſs: if it came into a warren, it neither barked, nor ran on the rabbets; but by a ſeeming neglect of them, or attention to ſomething elſe, deceived the object till it got within reach, ſo as to take it by a ſudden ſpring. This dog was leſs than the hound; more ſcraggy, and had prickt up ears; and by Dr. *Caius*'s deſcription ſeems to anſwer to the modern lurcher.

The third diviſion of the more generous dogs, comprehends thoſe which were uſed in fowling; firſt, the *Hiſpaniolus* or ſpaniel: from the name it may be ſuppoſed, that we were indebted to *Spain* for this breed: there were two varieties of this kind, the firſt uſed in hawking, to ſpring the game, which are the ſame with our ſtarters.

The other variety was uſed only for the net, and was called *Index*, or the ſetter; a kind well known at preſent. This kingdom has long been remarkable for producing dogs of this ſort, particular care having been taken to preſerve the breed in the utmoſt purity. They are ſtill diſtinguiſhed by the name of *Engliſh* ſpaniels; ſo that notwithſtanding the derivation of the name, it is probable they are natives of *Great Britain*. We may ſtrengthen our ſuſpicion by ſaying that the firſt who broke a dog to the net was an *Engliſh* nobleman of a moſt diſtinguiſhed character, the great

*Robert*

*Robert Dudly* Duke of *Northumberland**. The Pointer, which is a dog of foreign extraction, was unknown to our anceſtors.

The *Aquaticus*, or Fynder, was another ſpecies uſed in fowling; was the ſame as our water ſpaniel; and was uſed to find or recover the game that was ſhot.

The *Melitæus*, or *Fotor*; the ſpaniel gentle or comforter of Dr. *Caius* (the modern lap dog) was the laſt of this diviſion. The *Malteſe* little dogs were as much eſteemed by the fine ladies of paſt times, as thoſe of *Bologna* are among the modern. Old *Hollingſhed* is ridiculouſly ſevere on the fair of his days, for their exceſſive paſſion for theſe little animals; which is ſufficient to prove it was in his time† a novelty.

The ſecond grand diviſion of dogs comprehends the *Ruſtici*; or thoſe that were uſed in the country.

The firſt ſpecies is the *Paſtoralis*, or ſhepherd's dog; which is the ſame that is uſed at preſent, either in guarding our flocks, or in driving herds of cattle. This kind is ſo well trained for thoſe purpoſes, as to attend to every part of the herd be it ever ſo large; confine them to the road, and force in every ſtraggler without doing it the leaſt injury.

The next is the *Villaticus*, or *Catenarius*; the *maſtiff* or *band* dog; a ſpecies of great ſize and ſtrength, and a very loud barker. *Manwood* ſays‡, it derives its name from *maſe theſeſe*, being ſuppoſed to frighten away robbers by its tremendous voice. *Caius* tells us that three of theſe were reckoned a match for a bear; and four for a lion: but from an experiment made in the Tower by *James* the

* *Wood*'s *Ath. Ox.* II. 27.

† In the reign of Queen *Elizabeth*.

‡ *Manwood*'s *Foreſt Law*.

firſt,

firſt, that noble quadruped was found an unequal match to only three. Two of the dogs were diſabled in the combat, but the third forced the lion to ſeek for ſafety by flight *. The *Engliſh* bull dog ſeems to belong to this ſpecies; and probably is the dog our author mentions under the title of *Laniarius*. *Great-Britain* was ſo noted for its maſtiffs, that the *Roman* Emperors appointed an officer in this iſland with the title of *Procurator Cynegii* †, whoſe ſole buſineſs was to breed, and tranſmit from hence to the *Amphitheatre*, ſuch as would prove equal to the combats of the place,

Magnaque taurorum fracturi colla *Britanni* ‡.
And *Britiſh* dogs ſubdue the ſtouteſt bulls.

*Gratius* ſpeaks in high terms of the excellency of the *Britiſh* dogs,

Atque ipſos libeat penetrare *Britannos?*
O quanta eſt merces et quantum impendia ſupra!
Si non ad ſpeciem mentituroſque decores
Protinus: hæc una eſt catulis jactura *Britannis*.
At magnum cum venit opus, promendaque virtus,
Et vocat extremo præceps diſcrimine Mavors,
Non tunc egregios tantum admirere *Moloſſos* ||.

If *Britain*'s diſtant coaſt we dare explore,
How much beyond the coſt the valued ſtore;
If ſhape and beauty not alone we prize,
Which nature to the *Britiſh* hound denies:

* *Stow*'s *Annals*, 1427.
† *Camd. Brit.* in *Hampſhire*.
‡ *Claudian* de laude *Stilichonis*. *Lib.* iii. *Lin.* 301.
|| *Gratii* Cynegetion. *Lin.* 175.

But when the mighty toil the huntſman warms,
And all the ſoul is rouſed by fierce alarms,
When Mars calls furious to th' enſanguin'd field
Even bold *Moloſſians* then to theſe muſt yield.

*Strabo* tells us, that the maſtiffs of *Britain* were trained for war, and were uſed by the *Gauls* in their battles*: and it is certain a well-trained maſtiff might be of conſiderable uſe in diſtreſſing ſuch half-armed and irregular combatants as the adverſaries of the *Gauls* ſeem generally to have been before the *Romans* conquered them.

The laſt diviſion is that of the *Degeneres* or *Curs*. The firſt of theſe was the *Wappe*, a name derived from its note: its only uſe was to alarm the family, by barking, if any perſon approached the houſe. Of this claſs was the *Verſator*, or turnſpit; and laſtly the *Saltator*, or dancing dog; or ſuch as was taught variety of tricks, and carried about by idle people as a ſhew. Theſe *Degeneres* were of no certain ſhape, being mongrels or mixtures of all kinds of dogs.

We ſhould now, according to our plan, after enumerating the ſeveral varieties of *Britiſh* dogs, give its general natural hiſtory; but ſince *Linnæus* has already performed it to our hand, we ſhall adopt his ſenſe, tranſlating his very words (wherever we may) with literal exactneſs.

"The dog eats fleſh, and farinaceous vegetables, but not "greens: its ſtomach digeſts bones: it uſes the tops of graſs as a "vomit. It voids its excrements on a ſtone: the *album græcum* is "one of the greateſt encouragers of putrefaction. It laps up its

* *Strabo. Lib.* iv.

"drink

" drink with its tongue: it voids its urine ſideways, by lifting up " one of its hind legs; and is moſt diuretic in the company of a " ſtrange dog. *Odorat anum alterius:* its ſcent is moſt exquiſite, " when its noſe is moiſt: it treads lightly on its toes; ſcarce ever " ſweats; but when hot lolls out its tongue. It generally walks " frequently round the place it intends to lye down on: its ſenſe of " hearing is very quick when aſleep: it dreams. *Procis rixantibus* " *crudelis: catulit cum variis: mordet illa illos: cohæret copula junc-* " *tus:* it goes with young ſixty-three days; and commonly brings " from four to eight at a time: the male puppies reſemble the dog, " the female the bitch. It is the moſt faithful of all animals: is " very docible: hates ſtrange dogs: will ſnap at a ſtone thrown at " it: will howl at certain muſical notes: all (except the *S. Ameri-* " *can* kind) will bark at ſtrangers: dogs are rejected by the *Maho-* " *metans.*"

Vulpes. *Raii ſyn. quad.* 177
*Morton's Northampt.* 444.
*Meyer's an.* i. Tab. 36.
Canis fulvus, pilis cinereis intermixtis. *Briſſon quad.* 173.
*De Buffon. Tom.* vii. 75. Tab. 6.
*Geſner quad.* 966.
Vulpes auctorum. *Haſſelquiſt Itin.* 191.
Canis vulpes. *Lin. ſyſt.* 59.
Canis Alopex. C. cauda recta apice nigro. vulpes campeſtris. *ibid.*
Canis cauda recta apice albo, *Faun. Suec.* 7.
Vulpes vulgaris. *Klein quad.* 73.
*Br. Zool.* 28. *ſyn. quad. N.* 112.

11. FOX.

*Brit.* Llwynog, *fæm* Llwynoges.
*Fren.* Le Renard
*Ital.* Volpe
*Span.* Rapoſa
*Port.* Rapoza
*Germ.* Fuchs
*Dut.* Vos
*Swed.* Raff
*Dan.* Rev

THE fox is a crafty, lively, and libidinous animal: it breeds only once in a year (except ſome accident befals its firſt litter;)

ter;) and brings four or five young, which, like puppies, are born blind. It is a common received opinion, that this animal will produce with the dog kind; which may be well founded; ſince it has been proved that the congenerous wolf will*. Mr. *Brook*, animal-merchant in *Holborn*, turned a wolf to a *Pomeranian* bitch then in heat: the congreſs was immediate, with the circumſtances uſual with the canine ſpecies. The bitch brought ten whelps, one of which I afterwards ſaw at the Duke of *Gordon*'s in *Scotland*. It bore a great reſemblance to the male parent, and had much of its nature: being ſlipped at a weak deer, it inſtantly caught at the animal's throat and killed it. The fox ſleeps much in the day, but is in motion the whole night in ſearch of prey. It will feed on fleſh of any kind, but its favourite food is lambs, rabbets, hares, poultry, and feathered game. It will, when urged by hunger, eat carrots and inſects; and thoſe that live near the ſea-coaſts, will, for want of other food, eat crabs, ſhrimps, or ſhell fiſh. In *France* and *Italy*, it does incredible damage in the vineyards, by feeding on the grapes, of which it is very fond. The fox is a great deſtroyer of rats, and field mice; and like the cat, will play with them a conſiderable time, before it puts them to death.

* *M. de Buffon* aſſerts the contrary, and gives the following account of the experiment he had made. *J'en fis garder trois pendant deux ans une femelle & deux mâles: on tenta inutilement de les faires accoupler avec des chiennes; quoiqu'ils n'euſſent jamais vû de femelle de leur eſpece, et qu'ils paruſſent preſſés du beſoin de jouir, ils ne pûrent s'y determiner, ils refuſerent toutes les chiennes, mais des qu'on leur preſenta leur femelle légitime, ils la couvrirent, quoiqu'enchainés, et elle produiſit quatre petits. Hiſt. Naturelle*, vii. 81. The ſame experiments were tried with a bitch and a male fox, and with a dog and a female wolf, and as *M. de Buffon* ſays with the ſame ill ſucceſs. Vol. v. 210, 212. but the fact juſt cited, proves the poſſibility paſt conteſt.

When

When the fox has acquired a larger prey than it can devour at once, it never begins to feed till it has ſecured the reſt, which it does with great addreſs. It digs holes in different places, returns to the ſpot where it had left the booty; and (ſuppoſing a whole flock of poultry to have been its prey) will bring them one by one, and thruſt them in with its noſe, and then conceal them by ramming the looſe earth on them, till the calls of hunger incite him to pay them another viſit.

Of all animals the fox has the moſt ſignificant eye, by which it expreſſes every paſſion of love, fear, hatred, &c. It is remarkably playful, but like all other ſavage creatures half reclamed, will on the leſt offence bite thoſe it is moſt familiar with.

It is a great admirer of its buſhy tail, with which it frequently amuſes and exerciſes itſelf by running in circles to catch it: and in cold weather wraps it round its noſe.

The ſmell of this animal in general is very ſtrong, but that of the urine is moſt remarkably fœtid. This ſeems ſo offenſive even to itſelf, that it will take the trouble of digging a hole in the ground, ſtretching its body at full length over it, and there, after depoſiting its water, cover it over with the earth, as the cat does its dung. The ſmell is ſo offenſive, that it has often proved the means of the fox's eſcape from the dogs, who have ſo ſtrong an averſion to the filthy *effluvia*, as to avoid encountering the animal it came from. It is ſaid that the fox makes uſe of its urine as an expedient to force the cleanly badger from its habitation: whether that is the means is rather doubtful; but that the fox makes uſe of the badger's hole is certain: not through want of ability to form its own retreat; but to ſave itſelf ſome trouble: for after the expulſion of the firſt inhabitant. the fox improves, as well as enlarges it conſiderably.

derably, adding ſeveral chambers; and providently making ſeveral entrances to ſecure a retreat from every quarter. In warm weather it will quit its habitation for the ſake of baſking in the ſun, or to enjoy the freſh air; but then it rarely lies expoſed, but chuſes ſome thick brake, and generally of gorſe, that it may reſt ſecure from ſurprize. Crows, magpies, and other birds, who conſider the fox as their common enemy, will often, by their notes of anger, point out its retreat.

This animal is common in all parts of *Great Britain*, and ſo well known as not to require a deſcription. The ſkin is furniſhed with a ſoft and warm fur, which in many parts of *Europe* is uſed to make muffs and line cloaths. Vaſt numbers are taken in *Le Vallais*, and the *Alpine* parts of *Switzerland*. At *Lauſanne* there are furriers who are in poſſeſſion of between two and three thouſand ſkins, all taken in one winter.

There are three varieties of foxes found in the mountanous parts of theſe iſlands, which differ a little in form, but not in color, from each other. Theſe are diſtinguiſhed in *Wales*, by as many different names. The *Milgi* or *gre-hound fox*, is the largeſt, talleſt, and boldeſt; and will attack a grown ſheep or wether: the *maſtiff fox* is leſs, but more ſtrongly built: the *Corgi*, or *cur fox*, is the leſt, and lurks about hedges, out-houſes, *&c.* and is the moſt pernicious of the three to the feathered tribe. The firſt of theſe varieties has a white tag or tip to the tail: the laſt a black. The number of theſe animals in general would ſoon become intolerable, if they were not proſcribed, having a certain reward ſet on their heads.

WOLF. In this place we ſhould introduce the wolf, a congenerous animal, if we had not fortunately a juſt right to omit it in a hiſtory of *Britiſh*

Pl. V.

# The WOLF.

Dermoulins pinx.

Mazell fec.

*Britiſh* quadrupeds. It was, as appears by *Hollingſhed**, very noxious to the flocks in *Scotland* in 1577; nor was it entirely extirpated till about 1680, when the laſt wolf fell by the hand of the famous *Sir Ewin Cameron*. We may therefore with confidence aſſert the non-exiſtence of thoſe animals, notwithſtanding *M. de Buffon* maintains that the *Engliſh pretend* to the contrary †.

It has been a received opinion, that the other parts of theſe kingdoms were in early times delivered from this peſt by the care of king *Edgar*. In *England* he attempted to effect it by commuting the puniſhments for certain crimes into the acceptance of a number of wolves tongues from each criminal: in *Wales* by converting the tax of gold and ſilver into an annual tribute of 300 wolves heads. Notwithſtanding theſe his endeavours, and the aſſertions of ſome authors, his ſcheme proved abortive. We find that ſome centuries after the reign of that *Saxon* monarch, theſe animals were again increaſed to ſuch a degree, as to become the object of royal attention; accordingly *Edward* the firſt iſſued out his mandate to *Peter Corbet* to ſuperintend and aſſiſt in the deſtruction of them in the ſeveral counties of *Glouceſter*, *Worceſter*, *Hereford*, *Salop*, and *Stafford* ‡:

* *Diſc. Scot.* 10. † *Tom.* vii.

‡ Pro *Petro Corbet, de Lupis Capiendis.*

*Rex, omnibus Ballivis, &c. Sciatis quod injunximus dilecto et fideli noſtro* Petro Corbet *quod in omnibus foreſtis et parcis et aliis locis intra comitatus noſtros* Glouceſter, Wygorn, Hereford, Salop, *et* Stafford, *in quibus lupi poterunt inveniri lupos cum hominibus canibus et ingeniis ſuis capiat et deſtruat modis omnibus quibus viderit expedire. Et ideo vobis mandamus quod eidem intendentes et auxiliantes eſtis. Teſte rege apud* Weſtm. 14 Maii A. D. 1281. Rymer, vol. i. pars 2. p. 192.

By the grant of liberties from king *John*, to the inhabitants of *Devonſhire*, it appears that theſe animals were not then extirpated, even in that ſouthern country. *vide Appendix* No.

and

and in the adjacent county of *Derby*, as *Camden*, p. 902, informs us, certain perſons at *Wormhill* held their lands by the duty of hunting and taking the wolves that infeſted the country, whence they were ſtiled *Wolve hunt*. To look back into the *Saxon* times we find that in *Athelſtan*'s reign wolves abounded ſo in *Yorkſhire*, that a retreat was built at *Flixton* in that county, *to defend paſſengers from the wolves, that they ſhould not be devoured by them* : and ſuch ravages did thoſe animals make during winter, particularly in *January* when the cold was ſevereſt, that our *Saxon anceſtors* diſtinguiſhed that month by the title *wolf moneth* *. They alſo called an outlaw *Wolfſhed*, as being out of the protection of the law, proſcribed, and as liable to be killed as that deſtructive beaſt. *Et tunc gerunt* caput lupinum, *ita quod ſine judiciali inquiſitione rite pereant.* Bracton lib. iii. Tr. 11. c. 11. alſo Knighton 2356.

They infeſted *Ireland* many centuries after their extinction in *England*, for there are accounts of ſome being found there as late as the year 1710; the laſt preſentment for killing of wolves being made in the county of *Cork* about that time †.

BEAR. The Bear, another voracious beaſt, was once an inhabitant of this iſland, as appears from different authorities: to begin with the more antient, *Martial* informs us, that the *Caledonian* bears were uſed to heighten the torments of the unhappy ſufferers on the croſs.

Nuda *Caledonio* ſic pectora præbuit urſo
Non falſâ pendens in cruce *Laureolus* ‡.

* *Verſtegan*'s *Antiq.* 59.

† *Smith*'s *hiſt. Cork.* II. 226.

‡ *Martial. Lib. Spect. ep.* 7.

And

And *Plutarch* relates, that Bears were tranſported from *Britain* to *Rome*, where they were much admired *. Mr. *Llwyd* † alſo diſcovered in ſome old *Welſh* MS. relating to hunting, that this animal was reckoned among our beaſts of chace, and that its fleſh was held in the ſame eſteem with that of the hare or boar. Many places in *Wales* ſtill retain the name of *Pennarth*, or the bear's head, another evidence of their exiſtence in our country. It does not appear how long they continued in that principality; but there is proof of their infeſting *Scotland* ſo late as the year 1057 ‡, when a *Gordon*, in reward for his valor for killing a fierce bear, was directed by the King to carry three *Bears' heads* on his banner. They are ſtill found in the mountanous parts of *France*, particularly about the *grande Chartreuſe* in *Dauphiné*, where they make great havoke among the out-ricks of the poor farmers. Long after their extirpation out of this kingdom, theſe animals were imported for an end, that does no credit to the manners of the times: bear-baiting in all its cruelty was a favorite paſtime with our anceſtors. We find it in queen *Elizabeth*'s days, exhibited (tempered with our merry diſports) as an entertainment for an ambaſſador, and again among the various amuſements prepared for her majeſty at the princely *Kenelworth*.

Our nobility alſo kept their bear-ward: twenty ſhillings was the annual reward of that officer from his lord the fifth earl of NORTHUMBERLAND, 'when he comyth to my lorde in *criſtmas* with his 'lordſhippes beeſts for makynge of his lordſchip paſtyme the ſaid 'xii days ||.

* *Plutarch*, as cited by *Camden*, p. 1227. † *Raii ſyn. quad.* 214.

‡ Hiſt. of the *Gordons*. I, 2.

|| *Northumberland Houſhold Book*.

It will not be foreign to the ſubject here to add, that our monarchs in very early times kept up the ſtate of a menagery of exotic animals. *Henry* I. had his lions, leopards, lynxes, and porpentines (porcupines) in his park at *Woodſtock* *. The emperor *Frederick* ſent to Henry III. a preſent of three leopards in token of his royal ſhield of arms, wherein three leopards were pictured †. The ſame prince had alſo an elephant which (with its keeper) was maintained at the expence of the ſheriffs of *London* for the time being ‡. The other animals had their keeper, a man of faſhion, who was allowed ſix-pence a day for himſelf and ſix-pence for each beaſt.

* *Stow's hiſt London* 1. 79. † *Ibid.*

‡ *Idem.* 118.

Six

Six cutting teeth and two canine in each jaw. VIII. CAT.
Five toes before; four behind.
Sharp hooked claws, lodged in a ſheath, that may be exerted at pleaſure.
Round head: ſhort viſage: rough tongue.

Felis pilis ex fuſco flavicante, et albido variegatis veſtita, cauda annulis alternatim nigris et ex ſordide albo flavicantibus cincta. *Briſſon quad.* 192.
*De Buffon*, Tom. vi. 20. Tab 1.

*Morton Northampt.* 443.
*Geſner quad.* 325
Catus ſylveſtris ferus vel feralis eques arborum, *Klein quad.* 75.
*Br. Zool.* 22. *Syn. quad.* No. 133.

12. WILD.

*Brit.* Cath goed
*Fren.* Le Chat Sauvage
*Span.* Gato Montis

*Germ.* Wilde katze, Boumritter
*Dan.* Vild kat

THIS animal does not differ ſpecifically from the tame cat; the latter being originally of the ſame kind, but altered in color, and in ſome other trifling accidents, as are common to animals reclamed from the woods and domeſticated.

The cat in its ſavage ſtate is three or four times as large as the houſe-cat; the head larger, and the face flatter. The teeth and claws, tremendous: its muſcles very ſtrong, as being formed for rapine: the tail is of a moderate length, but very thick, marked with alternate bars of black and white, the end always black: the hips and hind part of the lower joints of the leg, are always black: the fur is very ſoft and fine. The general color of theſe animals is of a yellowiſh white, mixed with a deep grey: theſe colors, though

they appear at firſt ſight confuſedly blended together, yet on a cloſe inſpection will be found to be diſpoſed like the ſtreaks on the ſkin of the tiger, pointing from the back downwards, riſing from a black liſt that runs from the head along the middle of the back to the tail.

This animal may be called the *Britiſh* tiger; it is the fierceſt, and moſt deſtructive beaſt we have; making dreadful havoke among our poultry, lambs, and kids. It inhabits the moſt mountanous and woody parts of theſe iſlands, living moſtly in trees, and feeding only by night. It multiplies as faſt as our common cats; and often the females of the latter will quit their domeſtic mates, and return home pregnant by the former.

They are taken either in traps, or by ſhooting: in the latter caſe it is very dangerous only to wound them, for they will attack the perſon who injured them, and have ſtrength enough to be no deſpicable enemy. Wild cats were formerly reckoned among the beaſts of chace; as appears by the charter of *Richard* the ſecond, to the abbot of *Peterborough*, giving him leave to hunt the hare, fox, and wild cat. The uſe of the fur was in lining of robes; but it was eſteemed not of the moſt luxurious kind; for it was ordained 'that no abbeſs or nun ſhould uſe more coſtly apparel than ſuch 'as is made of lambs or cats ſkins*.' In much earlier times it was alſo the object of the ſportſman's diverſion.

Felemque minacem
Arboris in trunco longis præfigere telis.
*Nemeſiani Cynegeticon*, L. 55.

* Arch. Bp. *William Corboyl*'s canons, A. D. 1127. quoted by Mr. *T. Row* in Gent. Mag. *April* 1774.

Felis

Felis domeſtica ſeu catus. *Raii ſyn. quad.* 170.
*Charlton ex.* 20.
*Meyer's an.* i. Tab. 15.
*Geſner quad.* 317.
*Briſſon quad.* 191.

*De Buffon, Tom.* vi. 3. Tab. 2.
Felis catus, *Lin. ſyſt.* 62.
Felis cauda elongata, auribus æqualibus. *Faun. Suec.* 9.
*Br. Zool.* 21. *Syn. quad.* No. 133.

DOMESTIC.

*Brit.* Cath, *maſ.* Gwr cath
*Fren.* Le Chat
*Ital.* Gatto
*Span.* Gato
*Port.* Gato

*Germ.* Katz
*Dut.* Cyperſe Kat. Huyskat.
*Swed.* Katta
*Dan.* Kat.

THIS animal is ſo well known as to make a deſcription of it unneceſſary. It is an uſeful, but deceitful domeſtic; active, neat, ſedate, intent on its prey. When pleaſed purres and moves its tail: when angry ſpits, hiſſes, and ſtrikes with its foot. When walking, it draws in its claws: it drinks little: is fond of fiſh: it waſhes its face with its fore-foot, (*Linnæus* ſays at the approach of a ſtorm:) the female is remarkably ſalacious; a piteous, ſqualling, jarring lover. Its eyes ſhine in the night: its hair when rubbed in the dark emits fire: it is even proverbially tenacious of life: always lights on its feet: is fond of perfumes; *Marum*, *Cat-mint*, *valerian*, &c *.

Our anceſtors ſeem to have had a high ſenſe of the utility of this animal. That excellent Prince *Hoel dda*, or *Howel* the *Good*, did not think it beneath him (among his laws relating to the prices, &c. of animals †,) to include that of the cat; and to deſcribe the

* Vide *Lin. ſyſt.*

† *Leges Wallicæ*, p. 247, 248.

qualities

qualities it ought to have. The price of a kitling before it could ſee, was to be a penny; till it caught a mouſe two-pence; when it commenced mouſer four-pence. It was required beſides, that it ſhould be perfect in its ſenſes of hearing and ſeeing, be a good mouſer, have the claws whole, and be a good nurſe: but if it failed in any of theſe qualities, the ſeller was to forfeit to the buyer the third part of its value. If any one ſtole or killed the cat that guarded the Prince's granary, he was to forfeit a milch ewe, its fleece and lamb; or as much wheat as when poured on the cat ſuſpended by its tail (the head touching the floor) would form a heap high enough to cover the tip of the former *. This laſt quotation is not only curious, as being an evidence of the ſimplicity of ancient manners, but it almoſt proves to a demonſtration that cats are not aborigines of the iſlands; or known to the earlieſt inhabitants. The large prices ſet on them, (if we conſider the high value of ſpecies at that time †) and the great care taken of the improvement and breed of an animal that multiplies ſo faſt, are almoſt certain proofs of their being little known at that period.

* Sir *Ed. Coke* in his Reports, mentions the ſame kind of puniſhment anciently for killing a ſwan, by ſuſpending it by the bill, &c. Vide, *Caſe des Swannes.*

† *Howel dda* died in the year 948, after a reign of thirty-three years over *South Wales*, and eight years over all *Wales.*

Six cutting teeth, two canine, in each jaw.
Five toes before; five behind: very long ſtrait claws on the fore-feet.
A tranſverſe orifice between the tail, and the anus.

IX. BADGER.

Badger, Brock, Gray, Pate, Taxus ſive Meles. *Raii ſyn. quad.* 185.
*Meyer's an.* i. Tab. 31.
*Sib. Scot.* 11.
Meles pilis ex ſordidè albo et nigro variegatis veſtita, capite tæniis alternatim albis et nigris variegato. *Briſſon quad.* 183.
*De Buffon, Tom.* viii. Tab. 7. p. 104.
*Geſner quad.* 686.
Urſus meles. Urſus cauda concolore, corpore ſupra cinereo, ſubtus nigro, faſcia longitudinali per oculos aureſque nigra. *Lin. ſyſt.* 70.
Coati cauda brevi. *Klein quad.* 73.
Meles unguibus anticis longiſſimis *Faun. Suec.* 20.
*Br. Zool.* 30. *Syn quad. No.* 142.

13. COMMON.

*Brit.* Pryf Llwyd, Pryf penfrith
*Fren.* Le Taiſſon, Le Blaireau
*Ital.* Taſſo
*Span.* Texon
*Port.* Texugo
*Germ.* Tachs
*Dut.* Varkens Das
*Swed.* Graf Suin
*Dan.* Grevlin, Brok

THOUGH the badger is a beaſt of great ſtrength, and is furniſhed with ſtrong teeth, as if formed for rapine, yet it is found to be an animal perfectly inoffenſive: roots, fruits, graſs, inſects, and frogs are its food: it is charged with deſtroying lambs and rabbets; but, on enquiry, there ſeems to be no other reaſon to think it a beaſt of prey, than from the analogy there is between its teeth and thoſe of carnivorous animals. Nature denied the badger the ſpeed and activity requiſite to eſcape its enemies, ſo hath ſupplied it with ſuch weapons of offence that ſcarce any creature would hazard the attacking it; few animals defend themſelves better, or bite

bite harder: when purſued, they ſoon come to bay, and fight with great obſtinacy. It is an indolent animal, and ſleeps much, for which reaſon it is always found very fat. It burrows under ground, like the fox; and forms ſeveral different apartments, though with only one entrance, carrying in its mouth graſs in order to form a bed for its young. It confines itſelf to its hole during the whole day, feeding only at night: it is ſo cleanly an animal as never to obey the calls of nature in its apartments; but goes out for that purpoſe: it breeds only once in a year, and brings four or five at a time.

DESCR. The uſual length of the badger, is two feet ſix inches, excluſive of the tail, which is but ſix inches long: the weight fifteen pounds. The eyes are very ſmall: the ears ſhort and rounded: the neck ſhort: the whole ſhape of the body clumſy and thick; which being covered with long coarſe hairs like briſtles, makes it appear ſtill more aukward. The mouth is furniſhed with ſix cutting teeth and two canine teeth in each jaw; the lower has five grinders on each ſide, the upper five; in all thirty four.

The noſe, chin, lower ſides of the cheeks, and the middle of the forehead, are white: each ear and eye is incloſed in a pyramidal bed of black; the baſe of which incloſes the former; the point extends beyond the eye to the noſe: the hairs on the body are of three colors; the bottoms of a dirty yelloviſh white; the middle black; the ends aſh-colored, or grey; from whence the proverb, As grey as a badger. The hairs which cover the tail are very long, and of the ſame colors with thoſe of the body: the throat and under parts of the body are black: the legs and feet of the ſame color, are very ſhort, ſtrong and thick: each foot is divided into five toes; thoſe on the fore feet are armed with long claws, well adapted for digging;

ging; in walking the badger treads on its heel, like the bear; which brings the belly very near the ground. Immediately below the tail, between that and the anus, is a narrow tranſverſe orifice, which opens in a kind of pouch, from whence exudes a white ſubſtance of a very fœtid ſmell; this ſeems peculiar to the badger and the *Hyæna*.

This animal is not mentioned by *Ariſtotle*, not that it was unknown to the ancients, for *Pliny* takes notice of it *.

Naturaliſts once diſtinguiſhed the badger by the name of the ſwine-badger, and the dog-badger; from the ſuppoſed reſemblance of their heads to thoſe animals, and ſo divided them into two ſpecies: but the moſt accurate obſervers have been able to diſcover only one kind; that, whoſe head and noſe reſemble thoſe of the dog.

The ſkin of the badger, when dreſſed with the hair on, is uſed for piſtol furniture. The Highlanders make their pendent pouches of it. The hair is frequently uſed for making bruſhes to ſoften the ſhades in painting, which are called ſweetening tools. Theſe animals are alſo hunted in the winter nights for the ſake of their fleſh; for the hind quarters may be made into hams, not inferior in goodneſs to the beſt bacon. The fat is in great requeſt for ointments and ſalves.

In *China* it ſeems to be more common food than in *Europe:* for Mr. *Bell* † ſays, he has ſeen about a dozen at one time in the markets at *Pekin*; and that the *Chineſe* are very fond of them. It does not appear that this animal is found in the hotter parts of *Aſia*; but is confined to the cold, or the temperate parts of the world.

* Alia ſolertia in metu *Melibus*, ſufflatæ cutis diſtentu ictus hominum et morſus canum arcent. *Lib.* viii. c. 38.

† *Bell*'s Travels, I. 83.

X. WEESEL. Six cutting teeth, two canine, in each jaw.
Sharp noſe, ſlender bodies.
Five toes before, five behind.

14. FITCHET. Putorius. Polecat or Fitchet. *Raii ſyn. quad.* 199.
*Meyer's an.* ii. Tab. 6.
*Charlton ex.* 20.
*Geſner quad.* 767.
Muſtela pilis in exortu ex cinereo albidis, colore nigricante terminatis, oris circumferentia alba. *Briſſon quad.* 180.
*De Buffon, Tom.* vii. 199. Tab. 23.
Muſtela putorius, *Lin. ſyſt.* 67.
Muſtela fœtida, *Klein quad.* 63.
Muſtela flaveſcente nigricans, ore albo, collari flaveſcente. *Faun. Suec.* 16.
*Br. Zool.* 37. *Syn. quad.* No. 152.

| | | | |
|---|---|---|---|
| *Brit.* | Ffwlbard | *Germ.* | Iltis, ulk, Buntfing |
| *Fren.* | Le Putois | *Dut.* | Bonſing |
| *Ital.* | Foetta, Puzolo | *Swed.* | Iller |
| *Span.* | Putoro | *Dan.* | Ilder |

THE length of this animal is about ſeventeen inches, excluſive of the tail; that of the tail ſix. The ſhape of this animal in particular, as well as of the whole genus, is long and ſlender; the noſe ſharp-pointed, and the legs ſhort: in fine, admirably formed for inſinuating itſelf into the ſmalleſt holes and paſſages, in ſearch of prey: it is very nimble and active, runs very faſt, will creep up the ſides of walls with great agility, and ſpring with vaſt force. In running, the belly ſeems to touch the ground: in preparing to jump, it arches its back, which aſſiſts it greatly in that action.

The ears are ſhort, rounded and tipt with white: the circumfe-

rence

*N°. 14.*

## FITCHET.

## MARTIN.

*N°. 15*

rence of the mouth, that is to ſay, the ends of the lower and upper mandibles are white: the head, throat, breaſt, legs and thighs, are wholly of a deep chocolate color, almoſt black. The ſides are covered with hairs of two colors; the ends of which are of a blackiſh hue, like the other parts; the middle of a full tawny color: in others cinereous.

The toes are long, and ſeparated to the very origin: the tail is covered with pretty long hair.

MANNERS. The fitchet is very deſtructive to young game of all kinds, and to poultry: they generally reſide in woods, or thick brakes; burrowing under ground, forming a ſhallow retreat, about two yards in length; which commonly ends, for its ſecurity, among the roots of ſome large trees. It will ſometimes lodge under hay-ricks, and in barns: in the winter it frequents houſes, and makes a common practice of robbing the dairy of the milk: it alſo makes great havoke in warrens.

It will bring five or ſix young at a time. Warreners aſſert, that the fitchet will mix with the ferret; and they are ſometimes obliged to procure an intercourſe between theſe animals, to improve the breed of the latter, which by long confinement will abate its ſavage nature, and become leſs eager after rabbets, and conſequently leſs uſeful. M. *de Buffon* denies that it will admit the fitchet; yet gives the figure of a variety under the name of the *Ferret Polecat* *, which has much the appearance of being a ſpurious offſpring. But to put the matter out of diſpute, the following fact need only be related: The Rev. Mr. *Lewis*, Vicar of *Llanſowel* in *Caermarthenſhire*, had

* *La Furet Putois*, Tom. vii. Tab. 25

a tame female ferret, which was permitted to go about the houſe: at length it abſented itſelf for ſeveral days; and on its return proved with young: it produced nine, of a deep brown color, more reſembling the fitchet than the ferret. What makes the matter more certain is, that Mr. *Lewis* had no male of this ſpecies for it to couple with; neither was there any within three miles, and thoſe cloſely confined.

The ferret agrees with the fitchet in many reſpects, particularly in its thirſt after the blood of rabbets. It may be added, that the ferret comes originally from *Africa**; and is only cultivated in *Great Britain*.

Though the ſmell of the fitchet, when alive, is rank and diſagreeable, even to a proverb; yet the ſkin is dreſt with the hair on, and uſed as other furs for tippets, *&c.* and is alſo ſent abroad to line cloaths.

15. MARTIN. Martes, alias Foyna. The Martin and Martlet. *Raii ſyn. quad.* 200.
*Meyer's an.* ii. Tab. 4.
Martin, or Martern. *Charlton exer.* 20.
The Mertrick. *Martin's Weſt. Iſles*, 36.
*Geſner quad.* 764.
Muſtela pilis in exortu albidis caſtaneo colore terminatis veſtita, gutture albo. *Briſſon quad.* 178.
*De Buffon, Tom.* vii. 161. Tab. 18.
Muſtela martes. *Lin. ſyſt.* 67.
M. martes. *Klein. quad.* 64.
M. fulvo-nigricans gula pallida. *Faun. Suec.* 15.
*Br. Zool.* 38. *Syn. quad.* No. 154.

*Brit.* Bela graig
*Fren.* La Fouine
*Ital.* Foina, Fouina
*Span.* Marta, Gibellina
*Germ.* Hauſs marder, ſtein marder
*Dut.* Marter
*Swed.* Mard
*Dan.* Maar.

MANNERS. THIS is the moſt beautifull of the *Britiſh* beaſts of prey: its head is ſmall, and elegantly formed: its eyes lively: and all its

* Καὶ γαλας αγρίας ἃς ἡ λυϐύη φερει. *Strabo, Lib.* iii. p. 144. *Edit. Caſaubon.*

its motions ſhew great grace, as well as agility: when taken young, it is eaſily tamed, is extremely playful, and in conſtant good humour: nature will recur, if it gets looſe; for it will immediately take advantage of its liberty, and retire to its proper haunts. It makes great havoke among poultry, game, &c. and will eat mice, rats, and moles. With us it inhabits woods, and makes its lodge in the hollows of trees; and brings from four to ſix young at a time.

The martin is about eighteen inches long; the tail ten, or, if the meaſurement be taken to the end of the hair at the point, twelve inches. DESCRIP.

The ears are broad, rounded and open: the back, ſides, and tail, are covered with a fine thick down, and with long hair intermixed: the bottom is aſh-colored: the middle of a bright cheſnut color: the tips black: the head brown, with ſome ſlight caſt of red: the legs and upper ſides of the feet are of a chocolate color: the palms, or under ſides, are covered with thick down like that on the body: the feet are broad: the claws white, large and ſharp; well adapted for climbing trees, which in this country are its conſtant reſidence. The throat and breaſt are white: the belly of the ſame color with the back, but rather paler: the hair on the tail is very long; eſpecially at the end, where it appears much thicker than near the origin of it: the hair in that part is alſo darker. But martins vary in their colors, inclining more or leſs to aſh-color, according to their ages or the ſeaſons they are taken in.

The ſkin and excrements of this animal have a fine muſky ſcent; and are entirely free from that rankneſs which diſtinguiſhes the other ſpecies of this genus: the ſkin is a valuable fur; and much uſed for linings to the gowns of magiſtrates. FINE SMELL.

Martes

16. PINE MARTIN.

Martes abietum. *Raii ſyn. quad.* 200. *Meyer's an.* ii. Tab. 5.
Martes ſylveſtris. *Geſner quad.* 765.
Muſtela pilis in exortu ex cinereo albidis caſtaneo colore terminatis veſtita, gutture flavo. *Briſſon quad.* 179. *De Buffon, Tom.* vii. 186. Tab. 22. *Br. Zool.* 39. *Syn. quad.* No. 155.

*Brit.* Bela goed
*Fren.* La Marte
*Ital.* Marta, Martura, Martora, Martorello
*Span.* Marta
*Port.*
*Germ.* Feld-marder, wild-marder
*Dut.* Marter
*Swed.*

THIS ſpecies is found in *Great Britain*; but is much leſs common in *England* than the former: it is ſometimes taken in the counties of *Merioneth* and *Caernarvon*, as I was informed by my late worthy friend Mr. *W. Morris*, where it is diſtinguiſhed from the other kind, by the name of *bela goed*, or wood martin, it being ſuppoſed entirely to inhabit the woods; the *bela graig* to dwell only among the rocks. Tho' this is ſo rare in theſe parts, yet in *Scotland* it is the only kind; where it inhabits the fir foreſts, building its neſt at the top of the trees *. It loves a cold climate, and is found in much greater numbers in the north of *Europe*, than in the other parts. *North America* abounds with theſe animals.

FUR. Prodigious numbers of their ſkins are annually imported from *Hudſon's bay* and *Canada*. In one of the company's ſales † not fewer than 12,370 good ſkins, and 2360 damaged ones were ſold;

* Vide *Sibbald*'s *Hiſt. Scot.* Part II. Lib. iii. p. 11.

† In 1743. Vide *Dobbs*'s account of *Hudſon's bay*, 200.

and

Pl. VII

Nº 17

WEESEL.

ERMINE.

Nº 18

M Griffiths del

and about the ſame time, the *French* brought into the port of *Rochelle* from *Canada*, not leſs than 30,325.

The principal differences between this and the former kind, conſiſt in the ſize, this being leſs: the breaſt too is yellow; the color of the body much darker, and the fur in general greatly ſuperior in fineneſs, beauty, and value.

17. COMMON.

The Weaſel or Weeſel. Muſtela vulgaris: in *Yorkſhire*, the Fitchet or Foumart. *Raii ſyn. quad.* 195.
*Girald. Cambrenſ.* 149.
The Whitred. *Sib. Scot.* 11.

Muſtela ſupra rutila, infra alba. *Briſſon quad.* 173.
*De Buffon, Tom.* vii. 235. Tab. 29.
*Geſner quad.* 753.
Muſtela vulgaris. *Klein quad.* 62.
*Br. Zool.* 39. *Syn. quad.* No. 150.

*Brit.* Bronwen
*Fren.* La Belette
*Ital.* Donnola, Ballottula, Benula
*Span.* Comadreia
*Port.* Doninha

*Germ.* Wiſel
*Dut.* Weezel
*Swed.* Veſla
*Dan.* Væſel

DESCRIPT. THIS ſpecies is the leſt of the weeſel kind; the length of the head and body not exceeding ſix, or at moſt ſeven inches. The tail is only two inches and a half long, and ends in a point: the ears are large; and the lower parts of them are doubled in.

COLOR. The whole upper part of the body, the head, tail, legs, and feet are of a very pale tawny brown. The whole under ſide of the body from the chin to the tail is white; but beneath the corners of the mouth on each jaw is a ſpot of brown.

This,

Prey. This, like the reſt of the kind, is very deſtructive to young birds, poultry, and young rabbets; and beſides is a great devourer of eggs. It does not eat its prey on the place; but after killing it, by one bite near the head, carries it off to its young, or its retreat. The weeſel alſo preys upon moles, as appears by their being ſometimes caught in the mole-traps. It is a remarkably active animal, and will run up the ſides of walls with ſuch facility, that ſcarce any place is ſecure from it; and its body is ſo ſmall, that there is ſcarce any hole but what is pervious to it. This ſpecies is much more domeſtic than the others; frequenting out-houſes, barns, and granaries; where, to make as it were ſome atonement for its depredations among our tame fowl, it ſoon clears its haunts from rats and mice, being infinitely more an enemy to them than the cat itſelf. It brings five or ſix young at a time: its ſkin and excrements are moſt intolerably fœtid.

This animal is confounded by *Linnæus* with the Stoat or Ermine. He ſeems unacquainted with our weeſel in its brown color; but deſcribes it in the white ſtate under the title of *Snomus*, or *Muſtela nivalis* *. I have met with it in that circumſtance, in the iſle of *Ilay*.

* *Similima* Ermineo *ſed dimidio minor, caudæ apice pilo vix uno alterove albo. Faun. Suec.* No. 18. *Syſt. Nat.* 69.

Muſtela candida, animal ermineum, *Raii ſyn quad.* 198
*Mort. Northampt.* 442.
*Meyer's an.* ii. Tab. 23, 24.
Muſtela hieme alba, æſtate ſupra rutila infra alba, caudæ apice nigro. *Briſſon quad.* 176.
*De Buffon*, vii. 240. *Tab.* 29. *Fig.* 2.
*Tab.* 31. *Fig.* 1.
*Geſner quad.* 753.
Muſtela erminea. M. plantis fiſſis. caudæ apice atro. *Lin. ſyſt.* 68.
*Faun. Suec.* 17.
*Pontop. Norway. Part* ii. p. 25.
*Br. Zool.* 40. *Syn. quad.* No. 151.

18. STOAT, OR ERMINE.

*Brit.* Carlwm
*Fren.* L'Hermine, Le Roſelet
*Ital.* Armellino
*Span.* Armino, Armelina
*Germ.* Hermelin, *Klein.* 63.
*Swed.* Hermelin, Lekatt
*Dut.* Hermilyn
*Dan.*. Hermelin, Lekat

DESCRIP.

THE length of the ſtoat to the origin of the tail, is ten inches: that of the tail is five inches and a half. The colors bear ſo near a reſemblance to thoſe of the weeſel, as to cauſe them to be confounded together by the generality of common obſervers; the weeſel being uſually miſtaken for a ſmall ſtoat: but theſe animals have evident and invariable ſpecific differences, by which they may be eaſily known. Firſt, by the ſize; the weeſel being ever leſs than the ſtoat; ſecondly, the tail of the latter is always tipt with black, is longer in proportion to the bulk of the animal, and more hairy; whereas the tail of the weeſel is ſhorter, and of the ſame color with the body: thirdly, the edges of the ears, and the ends of the toes in this animal, are of a yellowiſh white. It may be added, that the ſtoat haunts woods, hedges and meadows; eſpecially where there are brooks, whoſe ſides are covered with ſmall buſhes; and ſometimes (but leſs frequently than the weeſel) inhabits barns, and other buildings.

ERMINES. In the moſt northern parts of *Europe*, theſe animals regularly change their color in winter; and become totally white, except the end of the tail, which continues invariably black; and in that ſtate are called *Ermines*: I am informed that the ſame is obſerved in the highlands of *Scotland*. The ſkins and tails are a very valuable article of commerce in *Norway*, *Lapland*, *Ruſſia*, and other cold countries; where they are found in prodigious numbers. They are alſo very common in *Kamtſchatka* and *Siberia**. In *Siberia* they burrow in the fields, and are taken in traps baited with fleſh. In *Norway* † they are either ſhot with blunt arrows, or taken in traps made of two flat ſtones, one being propped up with a ſtick, to which is faſtned a baited ſtring, which when the animals nibble, the ſtone falls down and cruſhes them to death. The *Laplanders* take them in the ſame manner, only inſtead of ſtones make uſe of two logs of wood ‡. The ſtoat is ſometimes found white in *Great-Britain*, but not frequently: and then it is called a white weeſel. That animal is alſo found white; but may be eaſily diſtinguiſhed from the other in the ermine ſtate, by the tail, which in the weeſel is of a light tawny brown. With us the former is obſerved to begin to change its color from brown to white in *November*, and to begin to reſume the brown the beginning of *March*.

HOW TAKEN.

The natural hiſtory of this creature is much the ſame with that of the weeſel, its food being birds, rabbets, mice, *&c.* its agility the ſame, and its ſcent equally fetid: it is much more common in *England* than that animal.

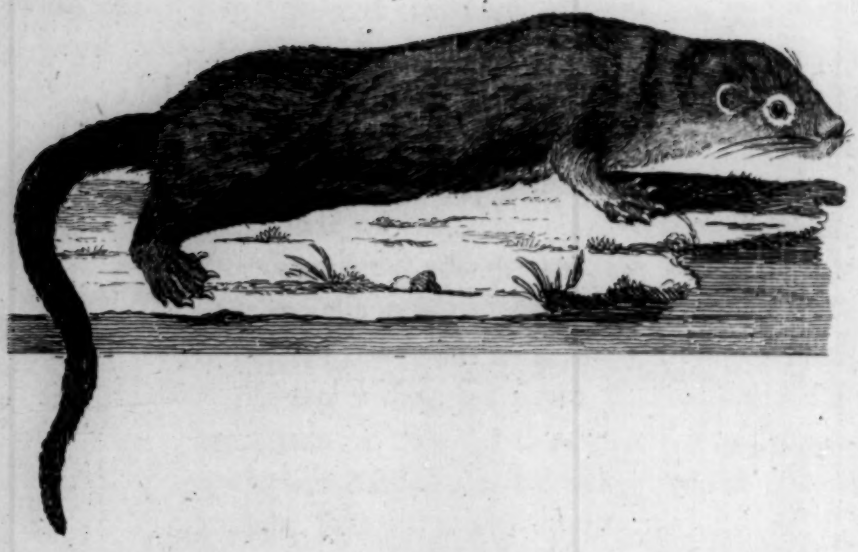
* *Bell's Travels*, i. 199.

† *Hiſt. Norway*, ii. 25.

‡ *Oeuvres de Maupertuis*, iii. 187.

Six

## OTTER.



## BADGER.

No 13

Six cutting teeth, two canine, in each jaw. XI. OTTER.
Five toes on each foot; each toe palmated.

Le Loutre, *Belon* 26. *pl.* 27
Lutra. The otter. *Raii ſyn. quad.* 187.
*Grew's Muſ.* 16.
*Morton's Northampt.* 444.
*Sib. Scot.* 10.
*Geſner quad.* 687.

Lutra caſtanei coloris. *Briſſon quad.* 201. 19. OTTER.
*De Buffon, Tom.* vii. 134. Tab. 11. xiii. 322.
Muſtela lutra. *Lin. ſyſt.* 66.
*Pontop. Norw.* 2. 27.
Lutra digitis omnibus æqualibus. *Faun. Suec.* 12.
*Br. Zool.* 32. *Syn. quad.* No. 138.

*Brit.* Dyfrgi
*Fren.* Le Loutre
*Ital.* Lodra, Lodria, Lontra.
*Span.* Nutria
*Port.*

*Germ.* Otter, Fiſch Otter
*Dut.* Otter
*Swed.* Utter
*Dan.* Odder

THE uſual length of this animal is three feet three inches, including the tail, which is ſixteen inches long. DESCRIP.

The head and noſe are broad and flat, the neck ſhort, and equal in thickneſs to the head: the body long: the tail broad at the baſe, tapers off to a point at the end, and is the whole way compreſſed horizontally. The eyes are very ſmall, and placed nearer the noſe than is uſual in quadrupeds: the ears extremely ſhort, and their orifice narrow: the opening of the mouth is ſmall, the lips muſcular, and capable of being brought very cloſe together: the noſe and the corners of the mouth are furniſhed with very long whiſkers; ſo that the whole appearance of the otter is ſomething terrible: it has thirty-ſix teeth, ſix cutting and two canine

above and below; of the former the middlemoſt are the leſt: it has beſides five grinders on each ſide in both jaws. The legs are very ſhort, but remarkably ſtrong, broad, and muſcular; the joints articulated ſo looſely, that the animal is capable of turning them quite back, and bringing them on a line with the body, ſo as to perform the office of fins. Each foot is furniſhed with five toes, connected by ſtrong broad webs, like thoſe of water fowl. Thus nature in every article has had attention to the way of life ſhe had allotted to an animal, whoſe food is fiſh; and whoſe haunts muſt neceſſarily be about waters.

The color of the otter is entirely a deep brown, except two ſmall ſpots of white on each ſide the noſe, and another under the chin. The ſkin of this animal is very valuable, if killed in the winter; and is greatly uſed in cold countries for lining cloaths: but in *England* it is only uſed for covers for piſtol furniture. The beſt furs of this kind come from the northern part of *Europe*, and *America*. Thoſe of *N. America* are larger than the *European* otters. The *Indians* make uſe of their ſkins for pouches, and ornament them with bits of horn. The fineſt ſort come from the colder parts of that continent: where they are alſo moſt numerous. Weſtward of *Carolina* *, there are ſome found of a white color inclining to yellow.

Fur.

Manners.

The otter ſwims and dives with great celerity, and is very deſtructive to fiſh: in rivers it is always obſerved to ſwim againſt the ſtream, to meet its prey. In very hard weather, when its natural ſort of food fails, it will kill lambs, ſucking pigs, and poultry. It is ſaid that two otters will in concert hunt that ſtrong and active

* *Lawſon's hiſt. Carol.* 119.

fiſh

fiſh the ſalmon. One ſtations itſelf above, the other below the place where the fiſh lies, and continue chaſing it inceſſantly till the ſalmon quite wearied becomes their prey. To ſuppoſe that they never prey in the ſea is a miſtake: for they have been often ſeen in it both ſwimming and bringing their booty on ſhore, which has been obſerved in the *Orknies* to have been cod, and congers. Its fleſh is exceſſively rank and fiſhy. The *Romiſh* church permits the uſe of it on maigre-days. In the kitchen of the *Carthuſian* convent near *Dijon*, we ſaw one preparing for the dinner of the religious of that rigid order, who, by their rules, are prohibited during their whole lives, the eating of fleſh.

It ſhews great ſagacity in forming its habitation: it burrows under ground on the banks of ſome river or lake; and always makes the entrance of its hole under water; works upwards to the ſurface of the earth, and forms before it reaches the top, ſeveral *holts*, or lodges, that in caſe of high floods, it may have a retreat, for no animal affects lying drier, and there makes a minute orifice for the admiſſion of air: it is further obſerved, that this animal, the more effectually to conceal its retreat, contrives to make even this little air hole in the middle of ſome thick buſh.

The otter brings four or five young at a time: as it frequents ponds near gentlemen's houſes, there have been inſtances of litters being found in cellars, ſinks, and other drains. It is obſervable that the male otters never make any noiſe when taken: but the pregnant females emit a moſt ſhrill ſqueal.

SEA OTTER.

Sir *Robert Sibbald*, in his hiſtory of *Fife*, p. 49, mentions a *Sea Otter*, which he ſays differs from the common ſort, in being larger, and having a rougher coat; but probably it does not differ ſpecifically from the kind that frequents freſh waters. Did not *Ariſtotle* place

LATAX. place his *Latax* * among the animals which ſeek their food among freſh waters, we ſhould imagine we had here recovered this loſt animal, which he mentions immediately after the otter, and deſcribes as being broader. Though this muſt remain a doubt, we may with greater confidence ſuppoſe the ſea otter to be the *Loup marin* of *Belon* †, which from a hearſay account, he ſays, is found on the *Engliſh* coaſts. He compares its form to that of a wolf, and ſays, it feeds rather on fiſh than ſheep. That circumſtance alone makes it probable, *Sibbald*'s animal was intended, it being well known, the otter declines fleſh when it can get fiſh. Little ſtreſs ought to be laid on the name, or compariſon of it to a wolf; this variety being of a ſize ſo ſuperior to the common, and its hair ſo much more ſhaggy, a common obſerver might readily catch the idea of the more terrible beaſt, and adapt his compariſon to it.

BEAVER. Beavers, which are alſo amphibious animals, were formerly found in *Great Britain*; but the breed has been extirpated many ages ago:

* Τοιαυτα δε εστιν ὁ τε καλουμενος κατωρ, και το σαβεριον και το σαλυριον, και ενυδρις, και ἡ καλουμενη λαλαξ. εστι δε τουτο πλατυτερον ενυδριδος, και οδοντας εχει ισχυρους εξισωσα γαρ νυκτωρ πολλακις, τας περι τον πολεμον κερκιδας επεμνει τοις οδοντιον. δακνει δε τους ανθρωπους και ἡ ενυδρις, και ουκ αφιησιν, ως λεγουσι, μεχρις αν οστου ψοφον ακουσῃ. το δε τριχωμα εχει ἡ λαλαξ σκληρον, και το ειδος μεταξυ του της φωκης τριχωματος, και του της ελαφου. *Ariſtot. Hiſt. Anim.* p. 905. A.

*Sunt etiam in hoc genere (ſc. animalium quadrupedum quæ victum ex lacubus et fluviis petunt) fiber, ſatherium, ſatyrium, lutris, latax, quæ latior lutre eſt, denteſque habet robuſtos, quippe quæ noctu plerumque aggrediens, virgulta proxima ſuis dentibus, ut ferro præcidat. Lutris etiam hominem mordet, nec deſiſtit (ut ferunt) niſi fracti oſſis crepitum ſenſerit. Lataci pilus durus, ſpecie inter pilum vituli marini et cervi.*

† *Belon de la Nature des Poiſons*, p. 28. pl. 29.

the

Pl. IX.

The MUSIMON.

The BEAVER.

De Seve del.t Mazell fec.

GRATIS
EX
BIBLIS

the lateſt accounts we have of them, is in *Giraldus Cambrenſis* *, who travelled through *Wales* in 1188: he gives a brief hiſtory of their manners; and adds, that in his time they were found only in the river *Teivi*; two or three waters in that principality, ſtill bear the name of *Llyn yr afangc* †, or the beaver lake; which is a further proof, that theſe animals were found in different parts of it: I have ſeen two of their ſuppoſed haunts; one in the ſtream that runs thro' *Nant Frankon*; the other in the river *Conway* a few miles above *Llanrwſt*; and both places in all probability had formerly been croſſed by *Beaver* dams. But we imagine they muſt have been very ſcarce even in earlier times; by the laws of *Hoel dda*, the price of a beaver's ſkin (*Croen Lloſtlydan* ‡) was fixed at one hundred and twenty pence, a great ſum in thoſe days.

* *Girald. Camb. Itin.* 178, 179.

† *Raii ſyn. quad.* 213.

‡ *Lloſtlydan*, that is, the broad tailed animal. *Leges Wallicæ*, 261.

## DIV. II. SECT. II.

With only two cutting teeth in each jaw.
Herbivorous, frugivorous.

XII. HARE.

Two cutting teeth in each jaw.
Long ears: ſhort tail.
Five toes before, four behind.

20. COMMON.

Lepus, *Plinii*, lib. viii. c. 55.
The Hare. *Raii ſyn. quad.* 204.
White Hare. *Mort. Northampt.* 445. *Sib. Scot.* 11.
*Meyer's an.* ii. Tab. 32.
*Geſner quad.* 605.
Lepus caudatus ex cinereo rufus. *Briſſon quad.* 94.
*De Buffon, Tom.* vi. 246. Tab. 38.
Lepus timidus. *Lin. ſyſt.* 77.
Lepus cauda abrupta pupillis atris. *Faun. Suec.* 35.
Lepus vulgaris cinereus. *Klein quad.* 51.
*Br. Zool.* 41. *Syn. quad.* No. 184.

*Brit.* Yſgyfarnog, Ceinach
*Fren.* Le Lievre
*Ital.* Lepre, Lievora
*Span.* Liebre
*Port.* Lebre
*Germ.* Has, Haas
*Dut.* Haas
*Swed.* Hare
*Dan.* Hare

TO enter on a minute deſcription of ſo well known an animal, would be to abuſe the reader's patience; yet to neglect pointing out the admirable contrivance of its ſeveral properties and parts, would be fruſtrating the chief deſign of this work: that of pointing out the Divine Wiſdom in the animal world.

Being a weak and moſt defenceleſs creature, it is endued, in a very diſtinguiſhed degree, with that preſerving paſſion, fear: this makes

makes it perpetually attentive to every alarm, and keeps it always lean.

To enable it to receive the moſt diſtant notices of dangers, it is provided with very long ears, which (like the tubes made uſe of by the deaf) convey to it the remoteſt ſounds.

Its eyes are very large and prominent, adapted to receive the rays of light on all ſides. Eyes.

To aſſiſt it to eſcape its purſuers by a ſpeedy flight, the hind legs are formed remarkably long, and furniſhed with ſtrong muſcles: their length give the hare ſingular advantages over its enemies in aſcending ſteep places; and ſo ſenſible is the animal of this, as always to make towards the riſing ground when ſtarted.

As it lies always upon the ground, its feet are protected above and below with a thick and warm covering of hair.

The various ſtratagems and doubles it uſes, when hunted, are ſo well known to every ſportſman, as not to deſerve mention; except to awaken their attention to thoſe faculties nature has endowed it with; which ſerve at the ſame time to increaſe their amuſement, as well as to prevent the animal's deſtruction.

It very rarely leaves its form or ſeat in the day; but in the night takes a circuit in ſearch of food, always returning through the ſame meuſes, or paſſes.

The color approaches very near to that of the ground; which ſecures it more effectually from the ſight of men, and of beaſts and birds of prey. Providence has been ſo careful in reſpect to the preſervation of the ſpecies of animals, as to cauſe in northern countries theſe as well as many others to change color, and become white at the beginning of winter, to render them leſs conſpicuous Color.

amidſt the ſnow. Accidental inſtances of white hares are met with in *South Britain*.

Hares differ much in ſize. The ſmalleſt are in the iſle of *Ilay*: the largeſt in that of *Man*, where ſome have been found to weigh twelve pounds.

FOOD. Its food is entirely vegetable; and it does great injury to nurſeries of young trees, by eating the bark off: it is particularly fond of pinks, parſley, and birch.

The hare never pairs; but in the rutting ſeaſon, which begins in *February*, the male purſues and diſcovers the female, by the ſagacity of its noſe. The female goes with young one month, brings uſually two young at a time; ſometime three, and very rarely four. Sir *Thomas Brown*, in his treatiſe on vulgar errors *, aſſerts the doctrine of ſuperfetation: i. e. a conception upon conception, or an improvement on the firſt fruit before the ſecond is excluded; and he brings this animal as an inſtance; aſſerting, from his own obſervation, that after the firſt caſt there remain ſucceſſive conceptions, and other younglings very immature, and far from the term of their excluſion; but as the hare breeds very frequently in the year, there is no neceſſity of having recourſe to this accident † to account for their numbers. The antients were acquainted with this circumſtance. *Horace* alludes to it in the ſecond ſatire of the fourth book.

*Fæcundi* leporis ſapiens ſectabitur armos,

ſays the *bon vivant*, every man of taſte will prefer the wing of the

* P. 118.

† For a farther account of this doctrine, we refer the curious reader to M. *de Buffon*'s works, vol. vi. p. 252, 279, &c.

fruitful

fruitful hare. *Pliny* as a philoſopher is more explicit, and aſſigning a moral reaſon for the great encreaſe of this animal gives the following elegant account of it. Lepus *omnium prædæ naſcens, ſolus præter* Daſypodem *ſuperfætat, aliud educans, aliud in utero pilis veſtitum, aliud implume, aliud inchoatum gerens pariter.*

Hares are very ſubject to fleas; *Linnæus* tells us, that the *Dalecarlians* make a ſort of cloth of the fur, called *filt*; which, by attracting thoſe inſects, preſerves the wearer from their troubleſome attacks *.

The hair of this creature forms a great article in the hat manufacture; and as this country cannot ſupply a ſufficient number, vaſt quantities are annually imported from *Ruſſia* and *Siberia.*

The hare was reckoned a great delicacy among the *Romans* †; the *Britains*, on the contrary, thought it impious even to taſte it ‡; yet this animal was cultivated by them; either for the pleaſure of the chace; or for the purpoſes of ſuperſtition, as we are informed that *Boadicia*, immediately before her laſt conflict with the *Romans*, let looſe a hare ſhe had concealed in her boſom, which taking what was deemed a fortunate courſe, animated her ſoldiers by the omen of an eaſy victory over a timid enemy ‖.

* *Faun. Suec.* 25.

† Inter aves turdus, ſi quid me judice verum:
Inter quadrupedes gloria prima Lepus. *Martial.* 13. 92.

‡ *Leporem et gallinam et anſerem guſtare fas non putant: hæc tamen alunt, animi voluptatiſque cauſa.* Cæſar. Com. lib. v.

‖ Ταυτα ειπουσα λαγων μεν εκ του κολπου, &c. *Xiphilini Epitome Dioniſ.* 173.

21. Alpine. Lepus hieme albus *Forſter hiſt. nat.* Volgæ. *Ph. Th.* LVII. 343. Alpine Hare *Syn quad. No.* 184.

THE *Alpine* hare inhabits the ſummits of the *highland* mountains, never deſcends into the vales, or mixes with the common ſpecies which is frequent in the bottoms: it lives among the rocks with *Ptarmigans*, natives of the loftieſt ſituations: does not run faſt; and if purſued is apt to take ſhelter beneath ſtones or in clefts of rocks: is eaſily tamed, and is very ſprightly and full of frolick: is fond of honey, and carraway comfits, and is obſerved to eat its own dung before a ſtorm.

It is leſs than the common hare, weighing only 6 lb. $\frac{1}{2}$. whereas the firſt weighs from eight to twelve pounds. Its hair is ſoft and full; the predominant color grey mixed with a little black and tawny. This is its ſummer's dreſs.

In winter it entirely changes to a ſnowy whiteneſs except the edges and tips of the ears which retain their blackneſs. The alteration of color begins in *September*, and firſt appears about the neck and rump. In *April* it again reſumes its grey coat. This is the caſe in *Styria* *, but in the *polar* tracts ſuch as *Greenland* it never varies from white, the eternal color of the country. In the intermediate climates between temperate and frigid, ſuch as *Scotland* and *Scandinavia* it regularly experiences theſe viciſſitudes of color.

* *Kramer Auſtr.* 315.

ALPINE HARE. *N°21.*

RABBET. *N°22.*

Cuniculus. The Rabbet, or Cony. *Raii ſyn. quad.* 205. *Meyer's an.* i. *Tab.* 83. *Geſner quad.* 362. Lepus caudatus, obſcure cinereus. *Briſſon quad.* 95. *De Buffon Tom.* vi. 303. Tab. 50, 51.

Lepus cuniculus. *Lyn ſyſt.* 77. Lepus cauda breviſſima papillis rubris. *Faun. Suec.* 26. Cuniculus terram fodiens; *Klein quad.* 52. *Br. Zool.* 43. *Syn quad. No.* 186.

22. RABBET.

*Brit.* Cwningen
*Fren.* Le Lapin
*Ital.* Coniglio
*Span.* Conejo
*Port.* Coelho

*Ger.* Koniglein, Kaninchin
*Dut.* Konyn
*Swed.* Kanin
*Dan.* Kanine

IT is well obſerved by *Pliny*, that nature 'hath ſhewed great 'kindneſs, in cauſing thoſe things to be moſt prolific, that are 'the moſt harmleſs and the propereſt for our food *.

PROLIFIC.

This excellent obſervation of his, cannot be better illuſtrated than in ſhewing the great fruitfulneſs of this animal; as it far exceeds that proof, brought by the ingenious author of the œconomy nature, in ſupport of the ſame quotation. The inſtance he produces is the pigeon; whoſe increaſe, from one pair, may in four years amount to 14.760 ‡: but rabbets will breed ſeven times a year, and bring eight young ones each time: on a ſuppoſition this happens regularly, during four years, their numbers will amount to 1,274,840.

By this account, we might juſtly apprehend being overſtocked

* *Benigna circa hoc natura, innocua et eſculenta animalia fœcunda generavit.* Lib. viii. c, 55.

† Vide *Swediſh* Eſſays, tranſlated by Mr. *Stillingfleet*, Ed. 1ſt. p. 75.

with

with theſe animals, if they had not a large number of enemies which prevents the too great increaſe: not only men, but hawks, and beaſts of prey, make dreadful havoke among the ſpecies. Notwithſtanding theſe different enemies, we are told by *Pliny*, and *Strabo*, that they once proved ſo great a nuiſance to the inhabitants of the *Balearic* iſlands, that they were obliged to implore the aſſiſtance of a military force from the *Romans*, in the time of *Auguſtus*, in order to extirpate them *. Their native country is *Spain*, where they were taken by means of ferrets, as we do at preſent, which animals were firſt introduced there out of *Africa* †: they love a temperate and a warm climate, and are incapable of bearing great cold, ſo that in *Sweden* ‡ they are obliged to be kept in houſes. Our country abounds with them; their furs form a conſiderable article in the hat manufactures; and of late, ſuch part of the fur as is unfit for that purpoſe, has been found as good as feathers for ſtuffing beds and bolſters. Numbers of the ſkins are annually exported into *China*. The *Engliſh* counties that are moſt noted for theſe animals are *Lincolnſhire*, *Norfolk*, and *Cambridgeſhire*. *Methold*, in the laſt county, is famous for the beſt ſort for the table: the ſoil there is ſandy, and full of moſſes and the *Carex* graſs. Rabbets ſwarm in the iſles of *Orkney*, where their ſkins form a conſiderable article of commerce. Excepting otters, brown rats, common mice, and ſhrews, no other quadrupeds are found there. The rabbets of thoſe iſles are in general grey, thoſe which inhabit the hills, grow hoary in winter.

Fur.

* *Plin.* lib. viii. c. 55. *Strabo*, lib. iii. † *Strabo*, iii. 144.

‡ *Faun. Suec.* 26.

Formerly

Formerly the ſilver-haired rabbets were in great eſteem for lining of cloaths, and their ſkins ſold at three ſhillings a piece *; but ſince the introduction of the more elegant furs, the price is fallen to ſixpence each. The *Sunk Iſland* † in the *Humber* was once famous for a mouſe-coloured ſpecies, now extirpated by reaſon of the injury it did to the banks by burrowing.

* *Hartlib's Legacy.* † *Ph. tr.* No. 361.

Two

XIII. SQUIRREL.

Two cutting teeth in each jaw.
Four toes before; five behind.
Tufted ears.
Long tail cloathed with long hair.

23. COMMON. Sciurus vulgaris. *Raii ſyn. quad.* 214. *Meyer's an.* i. *Tab.* 97. *Geſner quad.* 845. Sciurus rufus, quandoque griſeo admixto. *Briſſon quad.* 104. *De Buffon, Tom.* vii. 258. *Tab.* 32. Sciurus auriculis apice barbatis, palmis 4-dactylis plantis 5-dactylis. *Lin. ſyſt.* 86. Sciurus palmis ſolis ſaliens. *Faun. Suec.* 37. Sc. vulgaris rubicundus. *Klein quad.* 53. *Br. Zool.* 44. *Syn. quad.* No. 206.

| | | | |
|---|---|---|---|
| *Brit.* | Gwiwair | *Germ.* | Eichorn, Eichmermlin |
| *Fren.* | L'Ecureuil | *Dut.* | Inkhoorn |
| *Ital.* | Scoiattolo, Schiarro, Schiratto | *Swed.* | Ikorn, graſkin |
| *Span.* | Harda, Hardilla, Eſquilo | *Dan.* | Ekorn |
| *Port.* | Ciuro | | |

NAME. THE ſquirrel derives its name from the form of its tail, σκια a ſhade, ουρα a tail, as ſerving this little animal for an umbrella. That part is long enough to cover the whole body, and is clothed with long hairs, diſpoſed on each ſide horizontally, which gives it a great breadth. Theſe ſerve a double purpoſe; when erected, they prove a ſecure protection from the injuries of heat or cold; when extended, they are very inſtrumental in promoting thoſe vaſt leaps the ſquirrel takes from tree to tree. On the authority of *Klein* and *Linnæus*, we may add a third application of the form of the tail: theſe naturaliſts tell us, that when the ſquirrel is diſpoſed

diſpoſed to croſs a river, a piece of bark is the boat, the tail the ſail.

This animal is remarkably neat, lively, active, and provident; never leaves its food to chance, but ſecures in ſome hollow tree a vaſt magazine of nuts for winter proviſion. In the ſummer it feeds on the buds and young ſhoots; and is particularly fond of thoſe of the fir and pine, and alſo of the young cones. It makes its neſt of the moſs or dry leaves, between the fork of two branches; and brings four or five young at a time. Squirrels are in heat early in the ſpring, when it is very diverting to ſee the female feigning an eſcape from the purſuit of two or three males, to obſerve the various proofs they give of their agility, which is then exerted in full force. MANNERS.

The color of the whole head, body, tail, and legs of this animal, is a bright reddiſh brown: the belly and breaſt white; the ears are very beautifully ornamented with long tufts of hair, of a deeper color than thoſe on the body: the eyes are large, black, and lively: the fore teeth, ſtrong, ſharp, and well adapted to its food: the legs are ſhort and muſcular: the toes long, and divided to their origin; the nails ſtrong and ſharp; in ſhort, in all reſpects fitted for climbing, or clinging to the ſmalleſt boughs: on the fore-feet it has only four toes, with a claw in the place of the thumb or interior toe: on the hind feet there are five toes. DESCRIP.

When it eats or dreſſes itſelf, it ſits erect, covering the body with its tail, and making uſe of the fore-legs as hands. It is obſerved, that the gullet of this animal is very narrow, to prevent it from diſgorging its food, in deſcending of trees, or in down leaps.

XIV. DORMOUSE.

Two cutting teeth in each jaw.
Four toes before; five behind.
Naked ears.
Long tail covered with hair.

24. DORMOUSE.

Mus avellanarum minor. The Dormouſe or Sleeper. *Raii ſyn. quad.* 220.
The Dormouſe. *Edw.* 266.
*Geſner quad.* 162.
Glis ſupra rufus infra albicans. *Briſſon quad.* 115.
*De Buffon, Tom.* viii. 193. *Tab.* 26.
Mus avellanarius. *Lin. ſyſt.* 83.
Mus cauda longa piloſa corpore ruſo gula albicante. *Faun. Suec.* 35.
*Br. Zool.* 45. *Syn. quad.* No. 219.

*Brit.* Pathew
*Fren.* Le Muſcardin, Croquenoix, Rat-d'or
*Ital.* Moſcardino
*Span.* Liron
*Germ.* Rothe, Wald-mans
*Swed.* Skogſmus
*Dan.* Kaſſel-muus

THIS animal agrees with the ſquirrel in its food, reſidence, and ſome of its actions: on firſt ſight it bears a general reſemblance to it; but on a cloſer inſpection, ſuch a difference may be diſcovered in its ſeveral parts, as vindicates M. *Briſſon* for forming a diſtinct genus of the Dormice, or *Glires*. Theſe want the fifth claw on the interior ſide of their fore-feet; nor are their ears adorned with thoſe elegant tufts of hair that diſtinguiſh the ſquirrel kind. Theſe diſtinctions prevale in the other ſpecies, ſuch as the *Lerot* and *Loir*.

MANNERS. Dormice inhabit woods, or very thick hedges; forming their neſts in the hollow of ſome low tree, or near the bottom of a cloſe ſhrub:

ſhrub: as they want much of the ſprightlineſs of the ſquirrel, they never aſpire to the tops of trees; or, like it, attempt to bound from ſpray to ſpray: like the ſquirrel they form little magazines of nuts, *&c.* for winter proviſion; and take their food in the ſame manner, and ſame upright poſture. The conſumption of their hoard during the rigor of the ſeaſon is but ſmall: for they ſleep moſt part of the time; retiring into their holes at the firſt approach of winter, they roll themſelves up, and lie almoſt torpid the greateſt part of that gloomy ſeaſon. In that ſpace, they ſometimes experience a ſhort revival, in a warm ſunny day; when they take a little food, and then relapſe into their former ſtate.

DESCRIP. The ſize of the dormouſe is equal to that of a mouſe; but has a plumper appearance, and the noſe is more blunt; the eyes are large, black, and prominent; the ears are broad, rounded, thin, and ſemi-tranſparent: the fore-feet are furniſhed with four toes; the hind-feet with five; but the interior toes of the hind-feet are deſtitute of nails: the tail is about two inches and a half long, cloſely covered on every ſide with hair: the head, back, ſides, belly, and tail, are of a tawny red color; the throat white.

NEST. Theſe animals ſeldom appear far from their retreats, or in any open place; for which reaſon they ſeem leſs common in *England* than they really are. They make their neſts of graſs, moſs, and dead leaves; and bring uſually three or four young at a time.

XV. RAT. Two cutting teeth in each jaw.
Four toes before, five behind, very ſlender tail; naked, or very ſlightly haired.

25. BLACK.

Mus domeſticus major, ſeu Rattus. *Raii ſyn. quad.* 217.
*Meyer's an.* ii. Tab. 83.
*Geſner quad.* 731.
Mus cauda longiſſima obſcure cinereus. *Briſſon quad* 118.
*De Buffon, Tom.* vii. p. 278. *Tab.* 36.
Mus rattus. *Lin. ſyſt.* 83.
Mus cauda longa ſubnuda corpore fuſco cinereſcente. *Faun. Suec.* 33.
Mus Rattus, mus ciſtrinarius. *Klein quad.* 57.
*Br. Zool.* 46. *Syn. quad.* No. 226.

| | | | |
|---|---|---|---|
| *Brit.* | Llygoden ffrengig | *Germ.* | Ratz |
| *Fren.* | Le Rat | *Dut.* | Rot |
| *Ital.* | Ratto, Sorcio | *Swed.* | Rotta |
| *Span.* | Raton, Rata | *Dan.* | Rotte |
| *Port.* | Rato | | |

MANNERS. THE rat is the moſt pernicious of any of our ſmaller quadrupeds: our meat, corn, paper, cloaths, furniture, in ſhort every conveniency of life is a prey to this deſtructive creature: nor does it confine itſelf to theſe; but will make equal havoke among our poultry, rabbets, or young game. Unfortunately for us it is a domeſtic animal, always reſiding in houſes, barns, or granaries; and nature has furniſhed it with fore-teeth of ſuch ſtrength, as enable it to force its way through the hardeſt wood, or oldeſt morter. It makes a lodge, either for its day's reſidence, or for a neſt for its young, near a chimney; and improves the warmth of it, by forming there a magazine of wool, bits of cloth, hay

hay or ſtraw. It breeds frequently in the year, and brings about ſix or ſeven young at a time: this ſpecies increaſes ſo faſt, as to over-ſtock their abode; which often forces them, through deficiency of food, to devour one another: this unnatural diſpoſition happily prevents even the human race from becoming a prey to them: not but that there are inſtances of their gnawing the extremities of infants in their ſleep.

The greateſt enemy the rats have is the weeſel; which makes infinitely more havoke among them than the cat; for the weeſel is not only endowed with ſuperior agility; but, from the form of its body, can purſue them through all their retreats that are impervious to the former. The *Norway* rat has alſo greatly leſſened their numbers, and in many places almoſt extirpated them: this will apologize for a brief deſcription of an animal once ſo well known. Its length from the noſe to the origin of the tail, is ſeven inches: the tail is near eight inches long: the noſe is ſharp-pointed, and furniſhed with long whiſkers: the color of the head and whole upper part of the body is a deep iron-grey, bordering on black; the belly is of a dirty cinereous hue; the legs are of a duſky color, and almoſt naked: the fore-feet want the thumb or interior toe, having only in its place a claw: the hind-feet are furniſh with five toes. DESCRIP.

Among other officers, his *Britiſh* majeſty has a *rat-catcher*, diſtinguiſhed by a particular dreſs, ſcarlet embroidered with yellow worſted, in which are figures of mice deſtroying wheat-ſheaves. KING'S RAT-CATCHER.

26. BROWN. Mus ſylveſtris, Rat de bois. *Briſſon quad.* 20.
Le Surmulot. *De Buffon, Tom.* viii. 206. Tab. 27.
Mus norvegicus. *Klein quad.* 56.
Mus ex norvegia. *Seb. Mus. Tom.* ii. 64. *Tab.* 63.
*Br, Zool.* 47. *Syn. quad. No.* 227.

DESCRIP. THIS is a very large ſpecies; thicker, and of a ſtronger make than the common rat: the length from the end of the noſe to the beginning of the tail, is nine inches; the length of the tail the ſame; the uſual weight eleven ounces: the ears reſemble thoſe of the rat: the eyes large and black: the color of the head and whole upper part of the body is a light brown, mixed with tawny and aſh-color: the end of the noſe, the throat and belly, are of a dirty white, inclining to grey: the feet and legs almoſt bare; and of a dirty pale fleſh-color: the beginning of the tail is of the ſame color as the back; the reſt of the tail is covered with minute duſky ſcales, mixed with a few hairs.

HIST. This is the ſpecies well known in this kingdom under the name of the *Norway* rat; but it is an animal quite unknown in *Scandinavia*, as we have been aſſured by ſeveral natives of the countries that form that tract: and *Linnæus* * takes no notice of it in his laſt ſyſtem. It is fit here to remark an error that gentleman has in ſpeaking of the common rat, which he ſays was firſt brought from *America* into *Europe* by means of a ſhip bound to *Antwerp*. The fact is, that both rat and mouſe were unknown to the new world before it was diſcovered by the *Europeans*, and the firſt rats

* *Lin. ſyſt.* 83.

it

it ever knew, were introduced there by a ſhip from *Antwerp* *. This animal never made its appearance in *England* till about forty years ago †. It has quite extirpated the common kind wherever it has taken its reſidence; and it is to be feared that we ſhall ſcarce find any benefit by the change; the *Norway* rat having the ſame diſpoſition, with greater abilities for doing miſchief, than the common kind. This ſpecies burrows like the water rat, in the banks of rivers, ponds and ditches; it takes the water very readily, and ſwims and dives with great celerity: like the black ſpecies, it preys on rabbets, poultry, and all kind of game; and on grain and fruits. It increaſes moſt amazingly faſt, producing from fourteen to eighteen young at a time. Its bite is not only ſevere, but dangerous; the wound being immediately attended with a great ſwelling, and is a long time in healing. Theſe rats are ſo bold, as ſometimes to turn upon thoſe who purſue them, and faſten on the ſtick or hand of ſuch as offer to ſtrike them.

M. *Briſſon* deſcribes this ſame animal twice under different names, p. 170 under the title of *le rat du bois*; and again, p. 173 under that of *le rat de norvege*. M. *de Buffon* ſtiles it *le Surmulot*; as reſembling the mulots, or field mice, in many reſpects; but exceeding them in bulk.

I ſuſpect that this rat came in ſhips originally from the *Eaſt Indies*; a large brown ſpecies being found there, called *Bandicotes*, which burrow under ground. *Barbot* ‡ alſo mentions a ſpecies inhabiting the fields in *Guinea*, and probably the ſame with this.

* *Ovalle's Hiſt. of Chile in Churchill's Voy.* iii. 43.

† This ſpecies reached the neighborhood of *Paris*, about ſeventeen years ago.

‡ *Churchill's Coll. Voy.* 214.

Le

27. WATER. Le Rat d'Eau, *Belon* 30. *pl.* 31.
Mus major aquaticus, ſeu Rattus aquaticus. *Raii ſyn. quad.* 217.
Sorex aquaticus. *Charlton ex.* 25.
*Meyer's an.* ii. *Tab.* 84.
Mus cauda longa pilis ſupra ex nigro et flaveſcente mixtis, infra cinereis veſtitus. *Briſſon quad.* 124.
*De Buffon, Tom.* vii. 348. *Tab.* 43,
Mus amphibius. Mus cauda elongata piloſa plantis palmatis. *Lin ſyſt.* 82.
Caſtor cauda lineari tereti. *Faun. Suec.* 25. *Ed.* 1. Mus amphibius 52. *Ed.* 2.
Mus aquatilis. *Klein quad.* 57.
*Br. Zool.* 48. *Syn. quad. No.* 228.

*Brit.* Llygoden y dwfr
*Fren.* Le Rat d'eau
*Ital,* Sorgo morgange
*Span.*
*Port.*
*Germ.* Waſſer mauſe. W. Ratz
*Dut.* Water-rot
*Swed.* Watn-ratta
*Dan.* Vand-rotte

LINNÆUS, from the external appearance of this animal, has in one of his ſyſtems placed it in the ſame genus with the beaver. The form of the head, the ſhortneſs of the ears, and the thickneſs of the fur and the places it haunts, vindicate in ſome degree the opinion that naturaliſt was at that time of: but the form of the tail is ſo different from that of the beaver, as to oblige him to reſtore the water rat to the claſs in which he found it, in the ſyſtem of our illuſtrious countryman *Ray*.

MANNERS. The water-rat never frequents houſes; but is always found on the banks of rivers, ditches and ponds, where it burrows and breeds. It feeds on ſmall fiſh, or the fry of greater; on frogs, inſects, and ſometimes on roots: it has a fiſhy taſte; and in ſome countries is eaten; M. *de Buffon* informing us that the peaſants in *France* eat it on maigre days.

It ſwims and dives admirably well, and continues long under water,

water, though the toes are divided like thoſe of the common rat; not connected by membranes, as Mr. *Ray* imagined; and as *Linnæus*, and other writers, relate after him.

The male weighs about nine ounces; the length ſeven inches from the end of the noſe to the tail; the tail five inches: on each foot are five toes, the inner toe of the fore-foot is very ſmall; the firſt joint of the latter is very flexible, which muſt aſſiſt it greatly in ſwimming, and forming its retreat. The head is large, the ears ſmall, and ſcarce appear through the hair: the noſe blunt, and the eyes little: the teeth large, ſtrong, and yellow: the head and body are covered with thick and pretty long hairs, chiefly black; but mixed with ſome of a reddiſh hue: the belly is of an iron-grey: the tail is covered with ſhort black hairs, the tip of it with white hairs.

A female that we opened had ſix young ones in it.

Mus domeſticus medius. *Raii ſyn. quad.* 218.
Mus cauda longa ſupra e fuſco flaveſcens infra ex albo cinereſcens. *Briſſon quad.* 123.
*De Buffon, Tom.* vii. 325, Tab. 41.

Mus ſylvaticus, M. cauda longa palmis tetradactylis, plantis pentadactylis, corpore griſeo pilis nigris abdomine albo. *Lin. ſyſt.* 84.
*Faun. Suec.* 36.
*Brit. Zool.* 49. *Syn. quad. No.* 230.

28. FIELD.

*Brit.* Llygoden ganolig. Llygoden y maes

*Fren.* Le Mulot
*Dan.* Voed

THIS meaſures from the noſe-end to the ſetting on of the tail, four inches and half: the tail is four inches long: the

eyes are black, large, and full: the ears prominent: the head and upper part of the body, is of a yellowiſh brown, mixed with ſome duſky hairs: the breaſt is of an ochre color; the reſt of the under ſide is white: the tail is covered with ſhort hair.

MANNERS. Theſe animals are found only in fields and gardens: in ſome places they are called bean-mice, from the havoke they make among beans when firſt ſown. They feed alſo on nuts, acorns, and corn, forming in their burrows vaſt magazines of winter proviſion.

Sæpe exiguus mus
Sub terris poſuitque domos atque horrea fecit.
*Virgil Georg.* I. 181.

Often the little mouſe
Illudes our hopes; and ſafely lodged below
Hath formed his granaries.

Doctor *Derham* takes notice of this wonderful ſagacity of theirs, in providing againſt that ſeaſon when they would find a defect of food abroad: but they provide alſo for other animals: the hog comes in for a ſhare; and the great damage we ſuſtain in our fields, by their rooting up the ground, is chiefly owing to their ſearch after the concealed hoards of the field mice.

They generally make the neſt for their young very near the ſurface, and often in a thick tuft of graſs; they bring from ſeven to ten at a time.

Spa-

*Syn. quad.* No. 231. 29. HARVEST.
Leſs long-tailed field mouſe, *Br. Zool.* II. *App.* 498.

THIS ſpecies is very numerous in *Hampſhire*, particularly during harveſt.

They form their neſt above the ground, between the ſtraws of the ſtanding corn, and ſometimes in thiſtles: it is of a round ſhape, and compoſed of the blades of corn. They bring about eight young at a time.

Theſe never enter houſes: but are often carried in the ſheaves of corn into ricks; and often a hundred of them have been found in a ſingle rick, on pulling it down to be houſed.

Thoſe that are not thus carried away in the ſheaves, ſhelter themſelves during winter under ground, and burrow deep, forming a warm bed for themſelves of dead graſs.

They are the ſmalleſt of the *Britiſh* quadrupeds: their length from noſe to tail is only two inches and a half: their tail two inches: their weight one ſixth of an ounce. They are more ſlender than the other *long-tailed Field Mouſe*; their eyes leſs prominent; their ears naked, and ſtanding out of the fur; their tail ſlightly covered with hair; their back of a fuller red than the larger ſpecies; inclining to the color of a *Dormouſe*: the belly white; a ſtrait line along the ſides dividing the colors of the back and belly. DESCRIP.

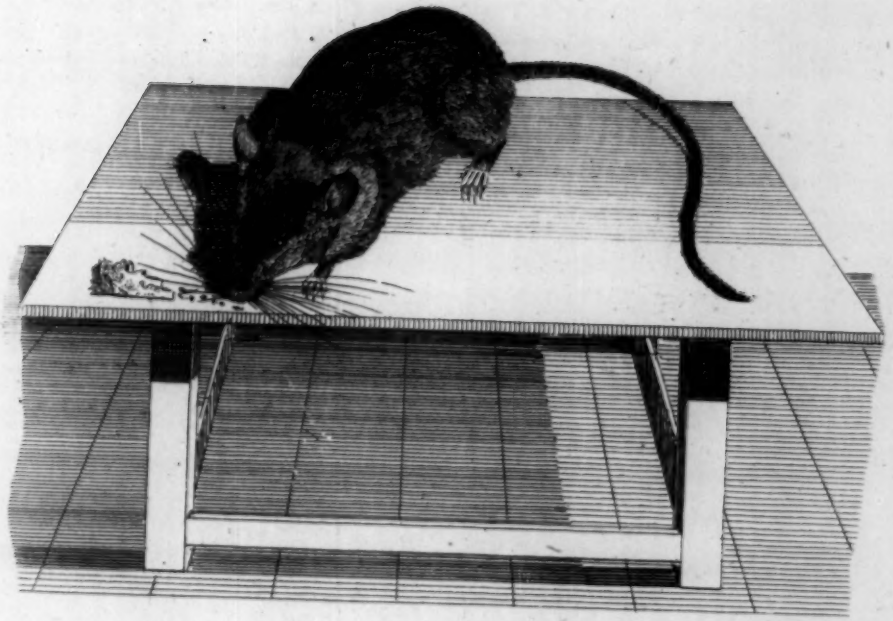
30. MOUSE. Mus domeſticus vulgaris ſeu minor. *Raii ſyn. quad.* 218.
*Seb. Muſeum*, i. *Tab.* 111. f. 6. its ſkeleton. *Tab.* 31.
*Geſner quad.* 714.
Mus cauda longiſſima, obſcure cinereus, ventre ſubalbeſcente. *Briſſon quad.* 119.
*De Buffon, Tom.* vii. 309. *Tab.* 39.
Mus muſculus. M. cauda elongata, palmis tetradactylis, plantis pentadactylis. *Lin. ſyſt.* 83.
*Faun. Suec.* 34.
Mus minor, Muſculus vulgaris. *Klein quad.* 57.
*Br. Zool.* 50. *Syn. quad.* No. 229.

| | | | |
|---|---|---|---|
| *Brit.* | Llygoden | *Germ.* | Maus |
| *Fren.* | La Souris | *Dut.* | Muys |
| *Ital.* | Topo, ſorice | *Swed.* | Mus |
| *Span.* | Raton | *Dan.* | Muus |
| *Port.* | Ratinho | | |

THIS timid, cautious, active, little animal, is too well known to require a deſcription: it is entirely domeſtic, being never found in fields; or, as M. *Buffon* obſerves, in any countries uninhabited by mankind: it breeds very frequently in the year, and brings ſix or ſeven young at a time. This ſpecies is often found of a pure white, in which ſtate it makes a moſt beautifull appearance; the fine full eye appearing to great advantage, amidſt the ſnowy color of the fur. The root of *white hellebore* and *ſtaves-acre*, powered and mixed with meal, is a certain poiſon to them.

№ 30

## MOUSE.



## WATER SHREW MOUSE.

№ 33

Mus agreſtis capite grandi brachiurus. *Raii ſyn. quad.* 218.
Mus cauda brevi pilis e nigricante et ſordide luteo mixtis in dorſo et ſaturate cinereis in ventre veſtitis. *Briſſon quad.* 125.

Mus agreſtis. *Faun. Suec.* 30. *De Buffon, Tom.* vii. 369. *Tab.* 47. *Klein quad.* 57 *No.* 50. *Br. Zool.* 50. *Syn. quad. No.* 233.

31. SHORT TAILED.

*Brit.* Llygoden gwtta'r maes
*Ital.* Campagnoli

*Fren.* Le petit Rat de champs, Le campagnol
*Dan.* Skier-muus

THE length of this ſpecies, from the noſe to the tail, is about ſix inches; the tail only an inch and a half: the head is very large: the eyes prominent: the ears quite hid in the fur: the whole upper part of the body is of a ferruginous color, mixed with black; the belly of a deep aſh-color: the tail is covered with ſhort hair, ending with a little buſh, about a quarter of an inch long. The legs, particularly the fore legs, very ſhort. DESCRIP.

This animal makes its neſt in moiſt meadows, and brings eight young at a time: it has a ſtrong affection for them: one that was ſeduced into a wire-trap, by placeing its brood in it, was ſo intent on foſtering them, that it appeared quite regardleſs of its captivity. The manners of this creature much reſemble the 28th ſpecies: like it, this reſides under ground, and lives on nuts, acorns, but particularly on corn: it differs from the former in the place of its abode: ſeldom infeſting gardens. MANNERS.

It has been obſerved that in houſing a rick of corn, the dogs have devoured all the mice of this ſpecies that they could catch; and rejected the common kind; and that the cats on the contrary would touch none but the laſt.

Mus

XVI. SHREW.

Two cutting teeth in each jaw pointing forward.
Long ſlender noſe; ſmall ears.
Five toes on each foot.

32. FETID.

Mus araneus. Shrew, Shrew Mouſe, or Hardy Shrew. *Raii ſyn. quad.* 239.
*Geſner quad.* 747.
Mus araneus ſupra ex fuſco rufus infra albicans. *Briſſon quad.* 126.
*De Buffon, Tom.* viii. 57. *Tab.* 10.
Sorex araneus. S. cauda corpore longiore. *Lin. ſyſt.* 74.
*Faun. Suec.* 24.
Mus araneus roſtro productiore. *Klein quad.* 58.
*Br. Zool.* 54. *Syn. quad. No.* 235.

*Brit.* Llygoden goch, Chwiſtlen, Llyg
*Fren.* La Muſaraigne
*Ital.* Toporango
*Span.* Murganho
*Port.*
*Germ.* Spitzmauſe, Ziſſmuſs, Muger
*Swed.* Nabbmus
*Dan.* Næbmuus, Muuſeſkier

DESCRIP. THE length of this little animal, from the end of the noſe to the origin of the tail is two inches and a half: that of the tail, near one inch and a half: the noſe is very long and ſlender; and the upper mandible is much longer than the lower, beſet with long but fine whiſkers: the ears are ſhort, and rounded: the eyes are very ſmall; and, like thoſe of the mole, almoſt concealed in the hair. The color of the head, and upper part of the body, is of a browniſh duſky red: the belly of a dirty white: the tail is covered with ſhort duſky hairs: the legs are very ſhort: the hind legs placed very far back: the feet are divided into five toes.

Above and below are two ſlender cutting teeth pointing forward, and

and on each a minute proceſs: the reſt of the teeth are ſo cloſely united, as to appear a continued ſerrated bone in every jaw; the whole number is twenty eight.

The ſhrew inhabits old walls, heaps of ſtones, and holes in the earth: is frequently found near hayricks, dunghills, and neceſſary houſes: is often obſerved rooting like a ſwine in ordure: it lives on corn, inſects, and any filth: from its food or the places it frequents, has a diſagreeable ſmell: cats will kill but not eat it: brings four or five young at a time. In *Auguſt* is an annual mortality of them, numbers being in that ſeaſon found dead in the paths. The antients believed them to be injurious to cattle, an error now detected.

Mus araneus dorſo nigro ventreque albo. *Merret Pinax.* 167.
Sorex fodiens, *Pallas ined.*
La Muſaraigne d'Eau, *de Buffon.* viii. 64.
Water Shrew, *Syn. quad. No.* 256.

33. WATER.

THIS ſpecies inhabits the banks of ditches, and other wet ſituations, and is in ſome places called the *Blind Mouſe*, from the ſmallneſs of its eyes. The *Germans* call it *Græber* or digger. I imagine it to be the ſame that the inhabitants of *Sutherland* call the water mole, and thoſe of *Cathneſs*, the *Lavellan*, which the laſt imagine poiſons their cattle; and is held by them in great abhorrence. It burrows in banks near the water: and according to *M. de Buffon* brings nine young. It was known to Dr. *Merret* above a century ago; but loſt again till within theſe few years, when it was found to inhabit *Lincolnſhire*, and *Lancaſhire*. Its length from noſe to tail is three inches and three quarters: the tail two inches: the noſe long and ſlender: ears minute: eyes very ſmall and hid in the fur: the color of the head and upper part of the body black: the throat, breaſt, and belly aſh color; beneath the tail is a triangular duſky ſpot.

Long

XVII. MOLE. Long ſlender noſe, upper jaw much longer than the lower.
No ears.
Fore-feet very broad, with ſcarce any apparent legs before: hind-feet very ſmall.

34. EUROPEAN. Talpa. The Mole, Mold-Warp, or Want. *Raii ſyn. quad.* 236.
*Meyer's an.* i. *Tab.* 2.
Talpa alba noſtras. *Seb. Mus.* i. p. 61. *Tab.* 32. f. 1.
*Sib. Scot.* 11.
*Geſner quad.* 931.
Talpa caudata nigricans pedibus anticis et poſticis pentadactylis. *Briſſon quad.* 203.
*De Buffon*, viii. 81. *Tab.* 12.
Talpa europæus. T. caudata, pedibus pentadactylis. *Lin. ſyſt.* 73.
*Faun Suec.* 23.
Talpa. *Klein quad.* 60.
*Br. Zool.* 52. *ſyn. quad. No.* 241.

*Brit.* Gwadd, Twrch daear
*Fren.* La Taupe
*Ital.* Talpa.
*Span.* Topo
*Port.* Toupeira
*Germ.* Maulwerf
*Dut.* Mol.
*Swed.* Mulvad, Surk
*Dan.* Muldvarp

THERE are many animals in which the Divine Wiſdom may be more agreeably illuſtrated; yet the uniformity of its attention to every article of the creation, even the moſt contemptible, by adapting the parts to its deſtined courſe of life, appears more evident in the mole than in any other animal.

A ſubterraneous abode being allotted to it, the ſeeming defects of ſeveral of its parts, vaniſh; which, inſtead of appearing maimed, or unfiniſhed, exhibit a moſt ſtriking proof of the fitneſs of their contrivance.

The breadth, ſtrength, and ſhortneſs of the fore-feet, which are inclined ſideways, anſwer the uſe as well as form of hands; to ſcoop out the earth, to form its habitation, or to purſue its prey. Had they

they been longer, the falling in of the earth would have prevented the quick repetition of its ſtrokes in working, or have impeded its courſe: the oblique poſition of the fore-feet, has alſo this advantage, that it flings all the looſe ſoil behind the animal.

The form of the body is not leſs admirably contrived for its way of life: the fore part is thick and very muſcular, giving great ſtrength to the action of the fore-feet; enabling it to dig its way with amazing force and rapidity, either to purſue its prey, or elude the ſearch of the moſt active enemy. The form of its hind parts, which are ſmall and taper, enables it to paſs with great facility through the earth, that the fore-feet had flung behind; for had each part of the body been of equal thickneſs, its flight would have been impeded, and its ſecurity precarious.

The ſkin is moſt exceſſively compact, and ſo tough as not to be cut but by a very ſharp knife: the hair is very ſhort, and cloſe ſet, and ſofter than the fineſt ſilk: the uſual color is black; not but that there are inſtances of theſe animals being ſpotted *, and a creme colored breed is ſometimes found in my lands near *Downing*.

The ſmallneſs of the eyes (which gave occaſion to the ancients to deny it the ſenſe of ſight †,) is to this animal a peculiar happineſs: a ſmall degree of viſion is ſufficient for an animal ever deſtined to live under ground: had theſe organs been larger, they would have been perpetually liable to injuries, by the earth falling into them; but nature, to prevent that inconvenience, hath not only made them very ſmall, but alſo covered them very cloſely with fur.

* *Edw.* 268.

† Aut *oculis capti* fodere cubilia talpæ. *Virg. Georg.* 1.
Or *ſightleſs* moles have dug their chamber'd lodge.

Anatomiſts mention (beſides theſe) a third very wonderful contrivance for their ſecurity; and inform us that each eye is furniſhed with a certain muſcle, by which the animal has power of withdrawing or exerting them, according to its exigencies.

To make amends for the dimneſs of its ſight, the mole is amply recompenſed, by the great perfection of two other ſenſes, thoſe of hearing and of ſmelling: the firſt gives it notice of the moſt diſtant approach of danger: the other, which is equally exquiſite, directs it in the midſt of darkneſs to its food: the noſe alſo, being very long and ſlender, is well formed for thruſting into ſmall holes, in ſearch of the worms and inſects that inhabit them. Theſe gifts may with reaſon be ſaid to compenſate the defect of ſight, as they ſupply in this animal all its wants, and all the purpoſes of that ſenſe. Thus amply ſupplied as it is, with every neceſſary accommodation of life; we muſt avoid aſſenting to an obſervation of a moſt reſpectable writer, and only refer the reader to the note, where he may find the very words of that author; and compare them with thoſe of our illuſtrious countryman, Mr. *Ray**.

It is ſuppoſed that the verdant circles ſo often ſeen in graſs grounds, called by country people *fairy rings*, are owing to the

* La taupe ſans être aveugle, a les yeux ſi petits ſi couverts, qu'elle ne peut faire grand uſage du ſens de la vûe: *en dedommagement la nature lui a donné avec magnificence l'uſage du ſixième ſens*, &c.

Mr. *Ray* makes the latter obſervation; but forms from it a concluſion much more ſolid and moral. *Teſtes maximos, paraſtatas ampliſſimas, novum corpus ſeminale ab his diverſum et ſeparatum —— penem etiam facile omnium, ni fallor, animalium longiſſimum: ex quibus colligere eſt maximam præ reliquis omnibus animalibus voluptatem in coitu hoc abjectum et vile animalculum percipere, ut habeant quod ipſi invideant, qui in hoc ſupremas vitæ ſuæ delicias collocant. Raii ſyn. quad.* 238, 239.

operations

operations of theſe animals, who at certain ſeaſons perform their burrowings by circumgyrations, which looſening the ſoil, gives the ſurface a greater fertility and rankneſs of graſs than the other parts within or without the ring.

The mole breeds in the ſpring, and brings four or five young at a time: it makes its neſt of moſs, and that always under the largeſt hillock, a little below the ſurface of the ground. The mole is obſerved to be moſt active, and to caſt up moſt earth, immediately before rain; and in the winter before a thaw; becauſe at thoſe times the worms and inſects begin to be in motion, and approach the ſurface: on the contrary, in very dry weather, this animal ſeldom or never forms any hillocks, as it penetrates deep after its prey, which at ſuch ſeaſons retires far into the ground. During ſummer they run in ſearch of ſnails and worms in the night time among the graſs, which makes them the prey of owls. The mole ſhews great art in ſkinning a worm, which it always does before it eats it; ſtripping the ſkin from end to end, and ſqueezing out all the contents of the body.

Theſe animals do incredible damage in gardens, and meadows; by looſening the roots of plants, flowers, graſs, corn, *&c.* *Mortimer* ſays, that the roots of *Palma chriſti* and *white hellebore*, made into a paſte, and laid in their holes, will deſtroy them. They ſeem not to have many enemies among other animals, except in *Scotland*, where (if we may depend on Sir *Robert Sibbald)* there is a kind of mouſe, with a black back, that deſtroys moles*. We have been aſſured that moles are not found in *Ireland.*

* *Sib. Hiſt. Scot.* Part iii. p. 12. I did not find it was known at preſent.

XVIII. URCHIN.

Five toes on each foot.

Body covered with ſhort ſtrong ſpines.

35. COMMON.

Echinus ſc. erinaceus terreſtris. *Raii ſyn. quad.* 231.
*Meyer's an.* i. Tab. 95, 96.
*Sib. Scot.* 11.
Erinaceus parvus noſtras. *Seb. Mus.* i. p. 78. *Tab.* 49. f. 1, 2.
Erinaceus auriculis erectis. *Briſſon quad.* 128.
*De Buffon, Tom.* viii. 28. *Tab.* 6.
Echinus terreſtris. *Geſner quad.* 368.
Erinaceus europæus. *Lin. ſyſt.* 75.
Erinaceus ſpinoſus auriculatus. *Faun. Suec.* 22.
Acanthion vulgaris noſtras. *Klein quad.* 66.
*Br. Zool.* 51. *Syn. quad.* No. 247.

*Brit.* Draenog, Draen y coed
*Fren.* L'Heriſſon
*Ital.* Riccio
*Span.* Erizo
*Port.* Ourizo
*Germ.* Igel
*Dut.* Eegel-varken
*Swed.* Igelhot
*Dan.* Pin-ſuin, Pin-ſoe

DESCR. THE uſual length of this animal, excluſive of the tail, is ten inches: the tail is little more than an inch long; but ſo concealed by the ſpines, as ſcarce to be viſible. The form of the noſe is like that of the hog; the upper mandible being much longer than the lower, and the end flat: the noſtrils are narrow, terminated on each ſide by a thin looſe flap: the color of the noſe is duſky; it is covered by a few ſcattered hairs: the upper part of the

the head, the ſides, and the rump, are clothed with ſtrong ſtiff hairs, approaching the nature of briſtles, of a yelloviſh and cinereous hue.

LEGS. The legs are ſhort, of a duſky color, and almoſt bare: the toes on each foot are five in number, long, and ſeparated the whole way: the thumb, or interior toe, is much ſhorter than the others: the claws long, but weak: the whole upper part of the body and ſides are cloſely covered with ſtrong ſpines, of an inch in length, and very ſharp pointed: their lower part is white, the middle black, the points white. The eyes are ſmall, and placed high in the head: the ears are round, pretty large, and naked. The mouth is ſmall, but well furniſhed with teeth: in each jaw are two ſharp pointed cutting teeth: in the upper jaw are on each ſide four tuſhes, and five grinders: in the lower jaw on each ſide are three tuſhes, pointing obliquely forward; and beyond thoſe, four grinders.

TEETH. The hedge hog is a nocturnal animal, keeping retired in the day; but is in motion the whole night, in ſearch of food. It generally reſides in ſmall thickets, in hedges, or in ditches covered with buſhes; lying well wrapped up in moſs, graſs, or leaves: its food is roots, fruits, worms, and inſects: it lies under the undeſerved reproach of ſucking cattle, and hurting their udders; but the ſmallneſs of its mouth renders that impoſſible.

MANNERS. It is a mild, helpleſs, and patient animal; and would be liable to injury from every enemy, had not Providence guarded it with a ſtrong covering, and a power of rolling itſelf into a ball, by that means ſecuring the defenceleſs parts. The barbarity of anatomiſts furniſhes us with an amazing inſtance

ſtance of its patience; one that was diſſected alive, and whoſe feet were nailed down to the table, endured that, and every ſtroke of the operator's knife, without even one groan *.

* *Clavis terebrari ſibi pedes et diſcindi viſcera patientiſſimè ferebat; omnes cultri ictus ſine gemitu pluſquam Spartanâ nobilitate concoquens.* Borrich: in Blas; de Echino. 64.

## DIV. III. PINNATED QUADRUPEDS.

With fin-like feet: fore legs buried deep in the ſkin: hind legs pointing quite backwards.

### XIX. SEAL.

Cutting teeth and two canine in each jaw.
Five palmated toes on each foot.
Body thick at the ſhoulders, tapering towards the tail.

#### 36. GREAT.

Sea calf, *Ph. Tranſ.* ix. 74. *Tab.* 5. Utſuk? *Crantz Greenl.* i. 125.
Le grand Phoque, *de Buffon*, xiii. 345. Great ſeal, *Syn. quad.* No. 266.

A SPECIES not very uncommon on the coaſt of *Scotland*, particularly about the rock *Hiſkyr*, one of the weſtern iſles, which grows to the length of twelve feet.

A young one of this ſpecies was ſome years ago ſhewen in *London:* notwithſtanding it was ſo young as to have ſcarce any teeth, yet it was ſeven feet and a half long.

In my voyage among the *Hebrides* I frequently heard of this ſpecies, but did not meet with it. Mr. *Thompſon*, our maſter, ſhot one; but it ſunk, and we loſt it.

Le

37. COMMON. Le Veau marin, ou loup de Mer. *Belon* 25. Pl. 26.
Seal, Scoile, or Sea-calf. Phoca, ſeu vitulus marinus. *Raii ſyn. quad.* 189.
Sea-calf. *Phil. Tranſact.* No. 469. *Tab.* 1. *Abridg.* xlvii.
*Smith's Kerry*, 84, 364.
*Borlaſe's Cornw.* 284.
*Worm. muſe.* 289.
Kaſſigiak. *Crantz's hiſt. Greenl.* i. 123.
Le Phoque, *de Buffon*, xiii. 333.
*Horr. Icel.* 88.
*Pontop. Norw.* ii. 125.
*Briſſon quad.* 162.
Phoca vitulina. *Lin. ſyſt.* 56.
Phoca. *Klein quad.* 93.
Phoca dentibus caninis tectis. *Faun. Suec.* 4.
*Br. Zool.* 34. *Syn. quad.* No. 265.

*Brit.* Moelrhon
*Fren.* Le Veau marin
*Ital.* Vechio marino
*Span.* Lobo marino
*Germ.* Meer wolff, Meer hund
*Dut.* Zee hond
*Swed.* Sial
*Dan.* Sæl hund

DESCR. THE common length of thoſe taken on the *Britiſh* coaſts, is from five to ſix feet.

The ſubject that we took our deſcription from, was a young one; ſo allowance muſt be made for the proportions of the meaſurements of thoſe that have attained their full ſize. Its length, from the end of the noſe to the end of the hind feet, was two feet nine inches; to the end of the tail, two feet three inches: the head was ſeven inches long: the tail two and a half: the fore legs were deeply immerſed in the ſkin of the body; what appeared out, was only eight inches long: the breadth of the fore feet, when extended, was three inches and a half: the hind legs were placed in ſuch a manner, as to point directly backwards; and were ten inches long: each hind foot, when extended, was nine inches and a half broad:

# SEALS

broad: every foot was divided into five toes; and each of thoſe connected by a ſtrong and broad web, covered on both ſides with ſhort hair.

The toes were furniſhed with ſtrong claws, well adapted to aſſiſt the animal in climbing the rocks it baſked on: the claws on the hind feet were about an inch long, ſlender, and ſtrait; except at the ends, which were a little incurvated.

The circumference of the body in the thickeſt part, which was near the ſhoulders, was one foot ten inches; but near the hind legs, where it was narroweſt, it meaſured only twelve inches.

The head and noſe were broad and flat, like thoſe of the otter; the neck ſhort and thick; the eyes large and black; it had no external ears, but in lieu of them, two ſmall orifices: the noſtrils were oblong: on each ſide the noſe were ſeveral long ſtiff hairs; and above each eye, were a few of the ſame kind.

The form of the tongue of this animal is ſo ſingular, that were other notes wanting, that alone would diſtinguiſh it from all other quadrupeds; being forked, or ſlit at the end. TONGUE.

The cutting teeth are ſingular in reſpect to their number, being ſix in the upper jaw, and only four in the lower. It has two canine teeth above and below, and on each ſide of the jaws five grinders; the total thirty-four.

The whole animal was covered with ſhort hair, very cloſely ſet together: the color of that on the head and feet was duſky: on the body duſky, ſpotted irregularly with white: on the back the duſky color predominated; on the belly white: but ſeals vary greatly in their marks and colors, and ſome have been found* entirely

* In the *Aſhmolean Muſeum* at *Oxford*, is a good picture of two white ſeals.

white. One that was taken near *Cheſter*, in *May* 1766, had on its firſt capture, the body naked like the ſkin of a porpeſe; and only the head and a ſmall ſpot beneath each fore leg, hairy: it was kept alive ſome time; but before it died, hair began to grow over the whole body *.

The ſeal is common on moſt of the rocky ſhores of *Great Britain* and *Ireland*, eſpecially on the northern coaſts: in *Wales* it frequents the coaſts of *Caernarvonſhire*, and *Angleſey*. It preys entirely on fiſh, and never moleſts the ſea fowl: for I have ſeen numbers of each floating on the waves, as if in company. Seals eat their prey beneath the water; and in caſe they are devouring any very oily fiſh, the place is known by a certain ſmoothneſs of the waves immediately above. The power of oil in ſtilling the waves excited by a ſtorm, is mentioned by *Pliny*: the moderns have made the experiment with ſucceſs †; and by that made one advance towards eradicating the vulgar prejudices againſt that great and elegant writer.

We muſt acknowlege the obligations we were under to the Rev. Mr. *Farrington* of *Dinas*, in *Caernarvonſhire*, for ſeveral learned communications; but in particular for the natural hiſtory of this animal, which we ſhall give the public in his own words.

Manners. 'The ſeals are natives of our coaſts; and are found moſt frequently between *Llyn* in *Caernarvonſhire*, and the northern parts of *Angleſey*: they are ſeen often towards *Carrig y moelrhon*, to the weſt of *Bardſey*, or *Ynys Enlli*; and the *Skerries*, commonly called

* *Vide* The figure publiſhed in the additional plates of the folio edition of this work.

† *Phil. Tranſ.* 1774. p. 445.

'in

'in the *Britiſh* language *Ynys y moelrhoniad*, or ſeal iſland. The 'Latin name of this amphibious animal is *Phoca**: the vulgar 'name is ſea calf; and on that account, the male is called the bull, 'and the female the cow; but the *Celtic* appelative is *Moelrhon*, 'from the word *Moel*, bald, or without ears, and *Rhon*, a ſpear or 'lance.

'They are excellent ſwimmers, and ready divers, and are very 'bold when in the ſea, ſwimming careleſsly enough about boats: 'their dens or lodgements are in hollow rocks, or caverns, near the 'ſea; but out of the reach of the tide: in the ſummer they will 'come out of the water, to baſk or ſleep in the ſun, on the top of 'large ſtones, or ſhivers of rocks; and that is the opportunity our 'countrymen take of ſhooting them: if they chance to eſcape, 'they haſten towards their proper element, flinging ſtones and dirt 'behind them, as they ſcramble along; at the ſame time expreſſing 'their fears by piteous moans; but if they happen to be overtaken, 'they will make a vigorous defence with their feet and teeth, till 'they are killed. They are taken for the ſake of their ſkins, and 'for the oil their fat yields: the former ſell for four ſhillings, or 'four and ſix-pence a piece; which, when dreſſed, are very uſeful 'in covering trunks, making waiſtcoats, ſhot pouches, and ſeveral 'other conveniencies.'

The fleſh of theſe animals, and even of porpeſes, formerly found a place at the tables of the great; as appears from the bill of fare of that vaſt feaſt that archbiſhop *Nevill* gave in the reign of *Edward*

* Doctor *Charleton* derives the word φωκη ex βωκη, *beatu* quem edit: *vide Exercitationes de dif. An. piſc.* p. 48. But I do not find any authority for his opinion.

the fourth, in which is ſeen, that ſeveral were provided on the occaſion*. They couple about *April*, on large rocks, or ſmall iſlands, not remote from the ſhore; and bring forth in thoſe vaſt caverns that are frequent on our coaſts; they commonly bring two at a time, which in their infant ſtate are covered with a whitiſh down, or woolly ſubſtance. The ſeal-hunters in *Cathneſs* have aſſured me that their growth is ſo ſudden, that in nine tides from their birth (fifty-four hours) they will become as active as their parents.

On the coaſt of that county are immenſe caverns opening into the ſea, and running ſome hundreds of yards beneath the land. Theſe are the reſort of ſeals in the breeding time, where they continue till their young are old enough to go to ſea, which is in about ſix or ſeven weeks. The firſt of theſe caves is near the *Ord*, the laſt near *Thrumſter:* their entrance ſo narrow, as only to admit a boat; their inſide very ſpatious and lofty. In the month of *October*, or the beginning of *November*, the ſeal-hunters enter the mouths of the caverns about midnight, and rowing up as far as they can, they land: each of them being provided with a bludgeon, and properly ſtationed, light their torches, and make a great noiſe, which brings down the ſeals from the farther end in a confuſed body with fearfull ſhrieks and cries: at firſt the men are obliged to give way for fear of being over-born; but when the firſt crowd is paſt, they kill as many as ſtraggle behind, chiefly the young, by ſtriking them on the noſe; a very ſlight blow on that part diſpatches them. When the work is over, they drag the ſeals to the boat, which two men are left to guard. This is a moſt hazardous employ; for

* *Leland's Collectanea.*

ſhould

ſhould their torches go out, or the wind blow hard from ſea during their continuance in the cave, their lives are loſt. The young ſeals of ſix weeks age, yield more oil than their emaciated dams: above eight gallons have been got from a ſingle whelp, which ſells from ſix-pence to nine-pence per gallon; the ſkins from ſix-pence to twelve-pence.

The natural hiſtory of this animal may be further elucidated, by the following extracts from a letter of the Rev. Dr. *William Borlaſe*, dated *October* the 24th, 1763.

'The ſeals are ſeen in the greateſt plenty on the ſhores of *Corn-*
'*wall*, in the months of *May*, *June*, and *July*.

'They are of different ſizes; ſome as large as a cow, and from
'that downwards to a ſmall calf.

'They feed on moſt ſorts of fiſh which they can maſter, and are
'ſeen ſearching for their prey near ſhore, where the whiſtling fiſh,
'wraws, and polacks reſort.

'They are very ſwift in their proper depth of water, dive like a
'ſhot, and in a trice riſe at fifty yards diſtance; ſo that weaker
'fiſhes cannot avoid their tyranny, except in ſhallow water. A
'perſon of the pariſh of *Sennan*, ſaw not long ſince a ſeal in purſuit
'of a mullet (that ſtrong and ſwift fiſh): the ſeal turned it to and
'fro' in deep water, as a gre-hound does a hare: the mullet at laſt
'found it had no way to eſcape, but by running into ſhoal water:
'the ſeal purſued; and the former, to get more ſurely out of dan-
'ger, threw itſelf on its ſide, by which means it darted into ſhoal-
'er water than it could have ſwam in with the depth of its paunch
'and fins, and ſo eſcaped.

'The ſeal brings her young about the beginning of autumn;
'our

'our fiſhermen have ſeen two ſucking their dam at the ſame time, 'as ſhe ſtood in the ſea in a perpendicular poſition.

'Their head in ſwimming is always above water, more ſo than 'that of a dog.

'They ſleep on rocks ſurrounded by the ſea, or on the leſs ac- 'ceſſible parts of our cliffs, left dry by the ebb of the tide; and if 'diſturbed by any thing, take care to tumble over the rocks into 'the ſea. They are extremely watchful, and never ſleep long 'without moving; ſeldom longer than a minute; then raiſe their 'heads, and if they hear or ſee nothing more than ordinary, lie 'down again, and ſo on, raiſing their heads a little, and reclining 'them alternately, in about a minute's time. Nature ſeems to have 'given them this precaution, as being unprovided with auricles, 'or external ears; and conſequently not hearing very quick, nor 'from any great diſtance.'

In Sir *R. Sibbald*'s hiſtory of *Scotland*, we find an account of another ſpecies of the ſeal kind, which is copied from *Boethius*. The animal he mentions is the ſea-horſe, *Walrus* or *Morſe:* as this vaſt creature is found in the *Norwegian* ſeas, we think it not improbable but that it may have appeared on the *Scottiſh* coaſts; but having no better authority for it, than what is above-mentioned, we dare not give it a place in a *Britiſh Zoology*. The teeth of that animal are as white and hard as ivory; but whether the ελεφάντινα ψάλια, ivory bits, which *Strabo* * mentions among the articles of the *Britiſh* commerce, were made of them, or the tooth of the *Narhwal*, or of ſome of the toothed whales, is not at this time

* *Strabo, Lib.* iv. 200.

eaſy

eaſy to be determined. But we may here remark that *Solinus*, in his account of *Britain*, informs us that the fine gentlemen of our iſland adorned the hilts of their ſwords with the teeth of ſea beaſts, which were as white as ivory itſelf *.

* *Polyhiſt.* c. xxxv.

## DIV. IV. WINGED QUADRUPEDS.

XX. BAT. With long extended toes to the fore-feet, connected by thin membranes, extending to the hind-legs.

38. GREAT. La noctule *de Buffon* VIII. *Tab.* XVIII. p. 128.
*Syn. quad.* No. 287.

IS a ſpecies leſs common in *Great-Britain* than the ſmaller. It ranges high in the air for food, and retires early in the ſummer.

Is the largeſt we have: its extent of wing is fifteen inches: its length to the rump two inches eight tenths: of the tail one inch ſeven tenths.

The noſe is ſlightly bilobated: ears ſmall and rounded: on the chin a minute *verruca*. Hair on the body a reddiſh aſh color.

They collect under eaves of buildings in vaſt numbers. The Rev. Doctor *Buckworth* informed me that under thoſe of *Queen's College, Cambridge*, he ſaw taken in one night, one hundred and eighty-five; the ſecond night ſixty-three: the third, two.

La

Pl. XIII

LONG EARED BAT.

*N.º 40*

GREAT BAT.

*N.º 38*

M. Griffiths del

HORSE-SHOE BAT.

La Chauve-ſouris a fer a cheval. *De Buffon* VIII. 131. *Tab.* xvii. xx.

Horſe-ſhoe Bat. *Syn. quad.* No. 186.

39. HORSE-SHOE.

THIS ſpecies was diſcovered by Mr. *Latham* Surgeon at *Dartford, Kent*; who was ſo obliging as to communicate it to me. They are found in greateſt numbers in the ſalt-petre houſes belonging to the powder mills; and frequent them during the evening for the ſake of the gnats which ſwarm there. They have been alſo found during winter in a torpid ſtate clinging to the roof. They often feed on *Chafers*, but only eat the body.

The length from the noſe to the tip of the tail is three inches and a half: the extent fourteen. At the end of the noſe is an upright membrane in form of a horſe ſhoe. Ears large, broad at their baſe, inclining backwards; but want the little or internal ear. The color of the upper part of the body is deep cinereous; of the lower whitiſh.

*Edw. av.* 201. f. 3.
*Alb.* iii. Tab. 101.
La petite chauve ſouris de notre pays. *Briſſon quad*, 160.
L'oreillar. *De Buffon, Tom.* viii. 118. 127. Tab. 17. f. 1.

Veſpertilio auritus. *Lin. ſyſt.* 47.
V. auritus, naſo oreque ſimplici, auriculis duplicatis, capite majoribus. *Faun. Suec.* 3.
*Br. Zool.* 56. *Syn. quad. No.* 292.

40. LONG EARED.

THIS ſpecies is the leſt of the *Britiſh* bats: the length being only an inch and three quarters; and the extent of the forelegs ſeven inches.

The principal diſtinction between this and the common kind, is the ears; which in this are above an inch long, very thin, and almoſt tranſparent: within each of theſe is a leſſer ear, or at leaſt a membrane reſembling one; which, as Mr. *Edwards* obſerves, may poſſibly ſerve as a valve to cloſe the larger, in the ſleeping ſtate of this animal.

41. COMMON. Veſpertilio. Bat, Flitter, or Flutter Mouſe. *Raii ſyn. quad.* 243.
Short-eared *Engliſh* Bat. *Edw. av.* 201. f. 2.
*Seb. Mus.* i.
The Rear Mouſe. *Charlton ex.* 80.
*Meyer's an* i. Tab. 3.
*Geſner av.* 766.
Veſpertilio murini coloris, pedibus omnibus pentadactylis. *Briſſon quad.* 158.
La chauve ſouris. *De Buffon, Tom.* viii. 113. Tab. 16.
Veſpertilio murinus. *Lin. ſyſt.* 47.
V. caudatus naſo oreque ſimplici. *Faun. Suec.* 2.
V. major. *Klein quad.* 61.
Veſpertilio. *Plinii Lib.* x. 6. 61. *Br. Zool.* 55. *Syn. quad.* No. 291.

*Brit.* Yſtlum
*Fren.* La Chauve ſouris
*Ital.* Nottola, Notula, Sportegli-one, Viſpriſtrello, Vil-piſtrello
*Span.* Murcielago, Morciegalo
*Port.* Morcego
*Germ.* Speckmaus, Fledermaus
*Dut.* Vledermuys
*Swed.* Laderlap, Fladermus
*Dan.* Flagermuus, Aftenbakke

THIS ſingular animal was placed by *Pliny*, *Geſner*, *Aldrovandus*, and ſome other naturaliſts, among the birds: they did not conſider, that it wanted every character of that order of animals, except the power of flying: if the irregular, uncertain, and jerking motion * of the bat in the air, can merit the name of flight.

* The *Engliſh* ſynonym of this animal, *Flitter*, or *Flutter mouſe*, is very expreſſive of its action in the air.

No

No birds whatſoever are furniſhed with teeth, or bring forth their young alive, and ſuckle them: were other notes wanting, theſe would be ſufficient to determine that the bat is a quadruped.

The ſpecies now deſcribed, is the moſt common: the uſual length of it is about two inches and a half: the extent of the fore-legs nine inches.

The members that are uſually called the wings, are nothing more than the four interior toes of the fore-feet, produced to a great length, and connected by a thin membrane; which extends alſo to the hind-legs; and from them to the tail: the firſt toe is quite looſe, and ſerves as a heel, when the bat walks; or as a hook, when it would adhere to any thing. The hind-feet are diſengaged from the membrane, and divided into five toes, furniſhed with pretty ſtrong claws. The membranes are of a duſky color: the body is covered with ſhort fur, of a mouſe-color, tinged with red. The eyes are very ſmall: the ears like thoſe of the mouſe.

This ſpecies of bat is very common in *England:* it makes its firſt appearance early in the ſummer, and begins its flight in the duſk of the evening: it principally frequents the ſides of woods, glades, and ſhady walks; and is alſo frequently obſerved to ſkim along the ſurface of pieces of water, in queſt of gnats and inſects: theſe are not its only food; for it will eat meat of any kind that it happens to find hanging up in a larder.

The bat brings only two young at a time; which it ſuckles from two teats placed on the breaſt, like thoſe of the human race. Theſe animals are capable of being brought to ſome degree of familiarity. The Rev. Mr. *White* of *Selborne* has ſeen a bat ſo far tamed as to eat inſects out of a perſon's hand; and while it was feeding would

bring its wings round before its mouth, hovering in the manner of birds of prey.

Towards the latter end of ſummer, the bat retires into caves, ruined buildings, the roofs of houſes, or hollow trees; where it remains the whole winter, in a ſtate of inaction; ſuſpended by the hind-feet, and cloſely wrapped up in the membranes of the fore-feet.

The voice of the bat is ſomewhat like that of the mouſe; but very low, and weak. *Ovid* takes notice both of that, and the derivation of its *Latin* name,

Lucemque peroſæ
Nocte volant, ſeroque tenent a veſpere nomen.
Minimam pro corpore vocem
Emittunt, peraguntque levi ſtridore querelas.
*Met.* lib. iv. 10.

Their little bodies found
No words, but murmur'd in a fainting ſound.
In towns, not woods, the ſooty bats delight,
And never till the duſk begin their flight;
Till *Veſper* riſes with his evening flame;
From whom the *Romans* have derived their name.

*Euſden.*

CLASS

# CLASS II.

# BIRDS.

AVES INTERNUNCIÆ JOVIS.

# CLASS II.

# BIRDS.

## Div. I. LAND BIRDS.

## II. WATER BIRDS.

### Div. I. Order I. RAPACIOUS.

Genus.

I. FALCON.
II. OWL.

### II. PIES.

III. SHRIKE.
IV. CROW.
V. CUCKOO.
VI. WRYNECK.
VII. WOODPECKER.
VIII. KINGFISHER.
IX. NUTHATCH.
X. HOOPOE.
XI. CREEPER.

### III. GALLINACEOUS.

COCK.
TURKEY.
PINTADO.

PINTADO.
PEACOCK.
PHEASANT.
XII. GROUS.
XIII. BUSTARD.

## IV. COLUMBINE.

XIV. PIGEON.

## V. PASSERINE.

XV. STARE.
XVI. THRUSH.
XVII. CHATTERER.
XVIII. GROSBEAK.
XIX. BUNTING.
XX. FINCH.
XXI. FLY-CATCHER.
XXII. LARK.
XXIII. WAGTAIL.
XXIV. WARBLERS.
XXV. TITMOUSE
XXVI. SWALLOW.
XXVII. GOATSUCKER.

# Div. II. WATER BIRDS.

## VI. CLOVEN FOOTED.

XXVIII. HERON.
XXIX. CURLEW.

Genus.

XXX. SNIPE.
XXXI. SANDPIPER.
XXXII. PLOVER.
XXXIII. OYSTER-CATCHER.
XXXIV. RAIL.
XXXV. GALLINULE.

## VII. FIN FOOTED.

XXXVI. PHALAROPE.
XXXVII. COOT.
XXXVIII. GREBE.

## VIII. WEB FOOTED.

XXXIX. AVOSET.
XL. AUK.
XLI. GUILLEMOT.
XLII. DIVER.
XLIII. TERN.
XLIV. GULL.
XLV. PETREL.
XLVI. MERGANSER.
XLVII. DUCK.
XLVIII. CORVORANT.

# EXPLANATION OF SOME TECHNICAL TERMS IN ORNITHOLOGY USED IN THIS WORK, AND BY LINNÆUS.

Fig.

1. *Cere. Cera* — THE naked ſkin that covers the baſe of the bill in the *Hawk* kind.

2. *Capiſtrum* — A word uſed by *Linnæus* to expreſs the ſhort feathers on the forehead juſt above the bill. In *Crows* theſe fall forwards over the noſtrils.

3. *Lorum* — The ſpace between the bill and the eye generally covered with feathers, but in ſome birds naked, as in the black and white *Grebe*.

4. *Orbits. Orbita* — The ſkin that ſurrounds the eye, which is generally bare, particularly in the *Heron* and *Parrot*.

5. *Emarginatum* — A bill is called *roſtrum emarginatum* when there is a ſmall notch near the end: this is conſpicuous in that of *Butcher-birds* and *Thruſhes*.

6. *Vibriſſæ* — *Vibriſſæ pectinatæ*, ſtiff hairs that grow on each ſide the mouth, formed like a double comb, to be ſeen in the *Goatſucker*, *Flycatcher*, &c.

7. *Baſtard wing. Alula ſpuria* — A ſmall joint riſing at the end of the middle part of the wing, or the *cubitus*; on which are three or five feathers.

8. *Leſſer coverts of the wings. Tectrices primæ* — The ſmall feathers that lie in ſeveral rows on the bones of the wings. The *under coverts* are thoſe that line the inſide of the wings.

9. *Great-*

9. *Greater coverts. Tectrices ſecundæ* — The feathers that lie immediately over the quil-feathers and ſecondary feathers.

10. *Quil-feathers. Primores* — The largeſt feathers of the wings, or thoſe that riſe from the firſt bone.

11. *Secondary feathers. Secondariæ* — Thoſe that riſe from the ſecond.

12. *Coverts of the tail. Uropygium* — Thoſe that cover the baſe of the tail.

13. *Vent-feathers.* — Thoſe that lie from the vent to the tail. *Criſſum Linnæi.*

14. *The tail. Rectrices*

15. *Scapular feathers* — That riſe from the ſhoulders and cover the ſides of the back.

16. *Nucha* — The hind part of the head.

17. *Roſtrum ſubulatum* — A term *Linnæus* uſes for a ſtrait and ſlender bill.

18. — To ſhew the ſtructure of the feet of the *Kingfiſher.*

19. *Pes ſcanſorius* — The foot of the *Woodpecker* formed for climbing. Climbing feet.

20. *Finned foot. Pes lobatus, pinnatus* — Such as thoſe of the *Grebes*, &c. Such as are indented as *fig.* 21. are called ſcalloped, ſuch are thoſe of *Coots* and ſcallop-toed *Sandpipers.*

22. *Pes tridactylus* — Such as want the back toe.

23. *Semi-palmated. Pes ſemipalmatus* — When the webs only reach half way of the toes.

24. *Ungue poſtico ſeſſili* — When the hind claw adheres to the leg without any toe, as in the *Petrels.*



25. *Digitis*

25. *Digitis 4 omnibus palmatis* — All the four toes connected by webs as in the *Corvorants*.

## Explanation of other Linnæan terms.

*Roſtrum cultratum* — When the edges of the bill are very ſharp, ſuch as in that of the *Crow*.

*Unguiculatum* — A bill with a nail at the end, as in thoſe of the *Gooſanders* and *Ducks*.

*Lingua ciliata* — When the tongue is edged with fine briſtles, as in *Ducks*.

*Integra* — When quite plain or even.

*Lumbriciformis* — When the tongue is long, round and ſlender like a worm, as that of the *Woodpecker*.

*Pedes compedes* — When the legs are placed ſo far behind as to make the bird walk with difficulty, or as if *in fetters*; as is the caſe with the *Auks*, *Grebes* and *Divers*.

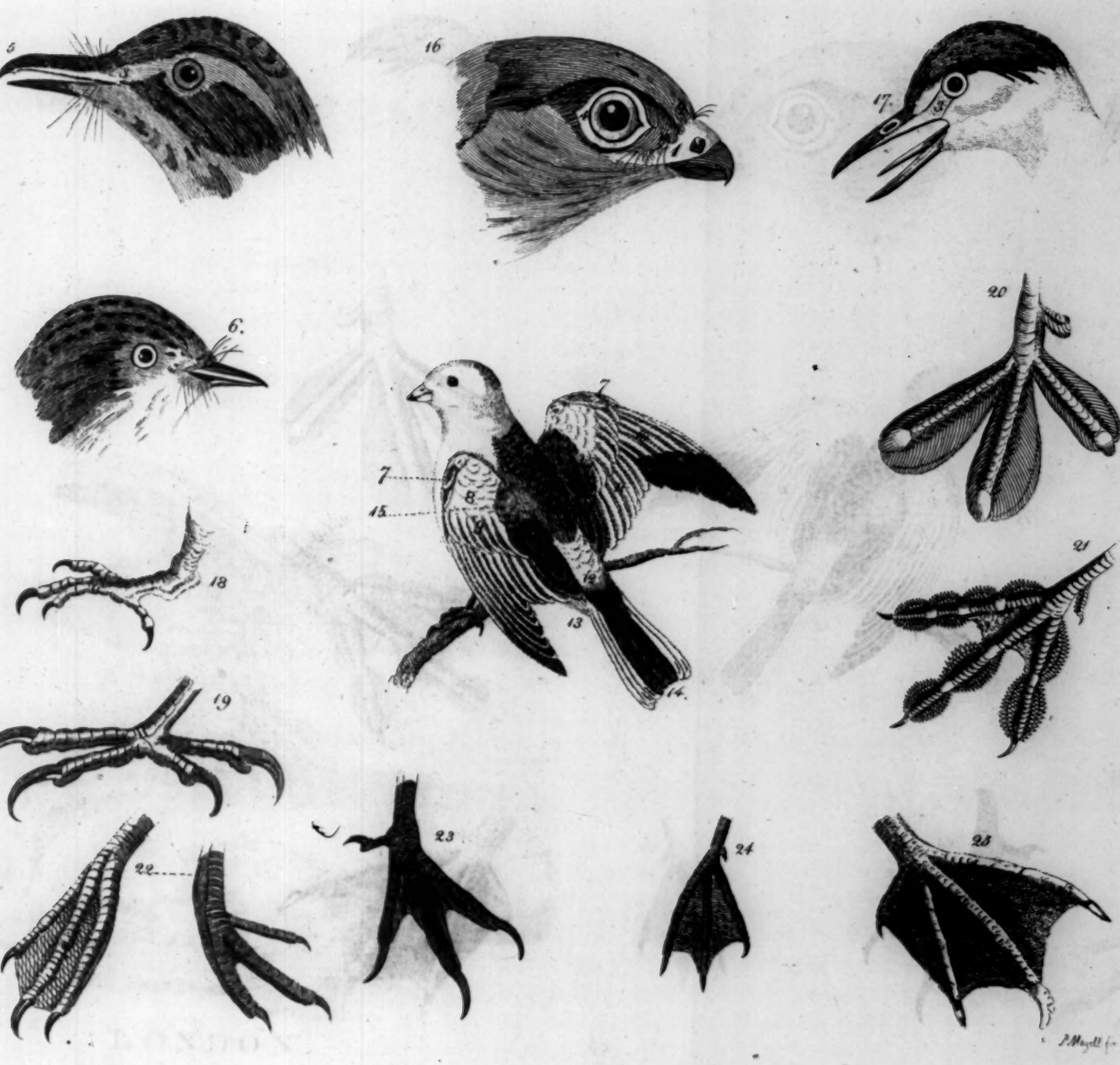
*Nares Lineares* — When the noſtrils are very narrow, as in *Sea Gulls*.

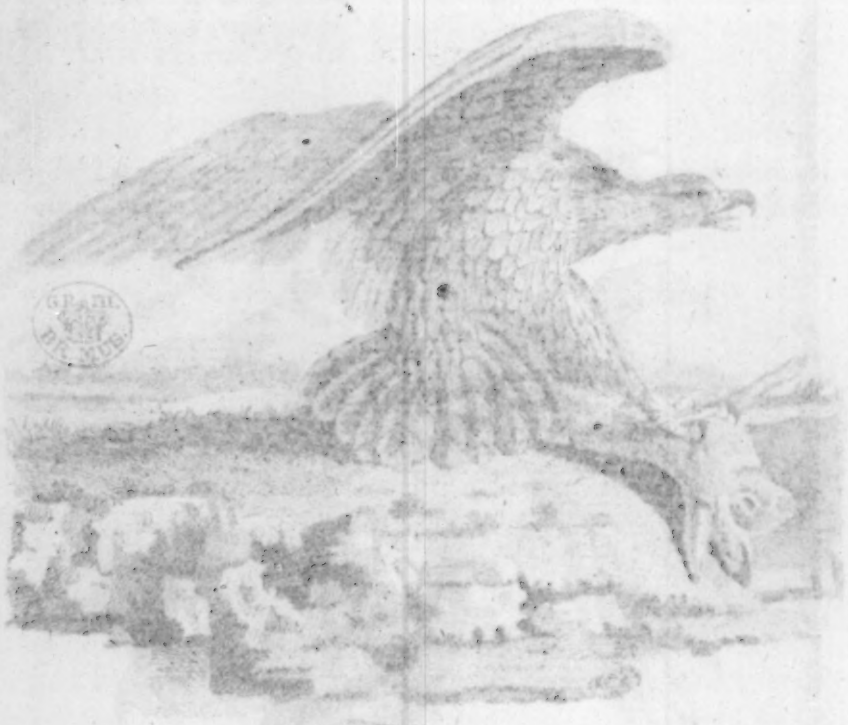
*Marginatæ* — With a rim round the noſtrils, as in the *Stare*.

CLASS

# EXPLANATION of TECHNICAL TERMS.







LONDON.
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MDCCLXXVI.

Pl. XVI.

# BRITISH ZOOLOGY.

## CLASS II. BIRDS.

### DIV. I. LAND BIRDS.

LONDON.
Printed for Benj. White,
MDCCLXXVI.

# CLASS II.

# BIRDS.

## Div. I. LAND BIRDS.

### Order I. RAPACIOUS.

Strong hooked BILL, the baſe covered with a CERE or naked ſkin. The firſt joint of the middle toe connected to that of the outmoſt by a membrane.

I. FALCONS.

Grand aigle royal. *Belon av.* 89.
Aquila Germana. *Geſn. av.* 168.
Aquila, aguglia, Chryſaetos. *Aldr.* I. 62.
Gneſios. *Plinii lib.* 10. *c.* 3.
The golden eagle. *Wil. orn.* 8.
Aquila aurea, ſeu fulva. *Raii ſyn. av.* 6.
Falcon Chryſaetos. *Lin. ſyſt.* 125.
Orn. *Faun. Suec. ſp.* 54.
L' Aigle doré. *Briſſon av.* I. 431.
Golden eagle. *Br. Zool.* 61. *Tab.* A. *Pl. Enl.* 410.
Stein adler. *Kram.* 325. *Scopoli.* No. 1.
Le grand Aigle. *Hiſt. D'Oys.* 1. 76.

42. GOLDEN-EAGLE

THIS ſpecies is found in the mountanous parts of *Ireland* where it breeds in the loftieſt cliffs: it lays three, and ſometimes

times four eggs, of which ſeldom more than two are prolific; providence denying a large increaſe to rapacious birds *, becauſe they are noxious to mankind; but graciouſly beſtowing an almoſt boundleſs one on ſuch as are of uſe to us. This kind of eagle ſometimes migrates into *Caernarvonſhire*, and there are inſtances, though rare, of their having bred in *Snowdon* hills; from whence ſome writers give that tract the name of *Creigiau'r eryrau*, or the eagle rocks; others that of *Creigiau'r eira*, or the ſnowy rocks; the latter ſeems the more natural epithet; it being more reaſonable to imagine that thoſe mountains, like *Niphates* in *Armenia*, and *Imaus* † in *Tartary*, derived their name from the circumſtance of being covered with ſnow, which is ſure to befal them near the half of every year, than from the accidental appearance of a bird on them, once only in ſeveral years.

Descrip. The golden eagle weighs about twelve pounds; its length is three feet; the extent of its wings ſeven feet four inches; the bill is three inches long, and of a deep blue color; the cere is yellow; the irides of a hazel color: the ſight and ſenſe of ſmelling are very acute: *her eyes behold afar off* ‡: the head and neck are cloathed with narrow ſharp pointed feathers, and of a deep brown color, bordered with tawny; the hind part of the head in particular is of a bright ruſt-color.

The whole body, above as well as beneath, is of a dark brown; and the feathers on the back are finely clouded with a deeper ſhade of the ſame: the wings, when cloſed, reach to the end of the tail:

* Τῶν γαμψωνύχων ὀλιγοτόκα πανία Ariſt. hiſt. an.

† *Imaus*——incolarum lingua nivoſum ſignificante. *Plin. lib.* 6. *c.* 21.

‡ *Job* 39, 27. Where the natural hiſtory of the eagle is finely drawn up.

the

the quil feathers are of a chocolate color, the ſhafts white: the tail is of a deep brown, irregularly barred and blotched with an obſcure aſh color, and uſually white at the roots of the feathers: the legs are yellow, ſhort, and very ſtrong, being three inches in circumference, and are feathered to the very feet: the toes are covered with large ſcales, and armed with moſt formidable claws, the middle of which are two inches long.

Eagles in general are very deſtructive to fawns, lambs, kids, and all kind of game; particularly in the breeding ſeaſon, when they bring a vaſt quantity of prey to their young. *Smith*, in his hiſtory of *Kerry*, relates that a poor man in that county got a comfortable ſubſiſtence for his family, during a ſummer of famine, out of an eagle's neſt, by robbing the eaglets of the food the old ones brought, whoſe attendance he protracted beyond the natural time, by clipping the wings and retarding the flight of the former. It is very unſafe to leave infants in places where eagles frequent; there being inſtances in *Scotland** of two being carried off by them, but fortunately,

Illæſum unguibus hæſit onus.

the theft was diſcovered in time, and the children reſtored unhurt out of the eagles neſts, to the affrighted parents. In order to extirpate theſe pernicious birds, there is a law in the *Orkney* iſles, which entitles any perſon that kills an eagle to an hen out of every houſe in the pariſh, in which it was killed †.

Eagles ſeem to give the preference to the carcaſſes of dogs or cats. Perſons, who make it their buſineſs to kill theſe birds, lay that of one or other by way of bait; and then conceal themſelves within

* *Martin's hiſt. Weſt. Iſles*, 299. *Sib. hiſt. Scot.* 14.

† *Camden's Brit.* I. 1474. The impreſſion of an eagle and child on the coin of the *Iſle of Man*, was probably owing to ſome accident of this kind.

gun-

gun-ſhot, They fire the inſtant the eagle alights, for ſhe that moment looks about before ſhe begins to prey. Yet quick as her ſight may be, yet her ſenſe of hearing ſeems ſtill more exquiſite. If hooded crows or ravens happen to be nearer the carrion and reſort to it firſt, and give a ſingle croak, the eagle is certain of inſtantly repairing to the ſpot, if there is one in any part of the neighborhood.

LONGEVITY. Eagles are remarkable for their longevity; and for their power of ſuſtaining a long abſtinence from food. Mr. *Keyſler* relates that an eagle died at *Vienna* after a confinement of 104 years. This preeminent length of days probably gave occaſion to the ſaying of the PSALMIST, *thy youth is renewed like the eagle's*. One of this ſpecies, which was nine years in the poſſeſſion of *Owen Holland*, Eſq; of *Conway*, lived thirty-two years with the gentleman who made him a preſent of it; but what its age was when the latter received it from *Ireland* is unknown. The ſame bird alſo furniſhes a proof of the truth of the other remark, having once, through the neglect of ſervants, endured hunger for twenty-one days, without any ſuſtenance whatſoever.

43. BLACK EAGLE.

Golden eagle, with a white ring about its tail. *Wil. orn.* 59. *Raii ſyn. av.* 6. White tailed eagle. *Edw.* 1.

Falco fulvus. *Lin. ſyſt.* 125. *Briſſon av.* I. 420. *Hiſt. d'oys.* I. 86. Ring-tail Eagle. *Br. Zool.* 62. *Pl. Enl.* 409.

DESCRIP. THIS bird is common to the northern parts of *Europe* and *America*; that figured by Mr. *Edwards*, differing only in ſome

ſome white ſpots on the breaſt, from our ſpecies. It is frequent in *Scotland*, where it is called the *Black Eagle*, from the dark color of the plumage. It is very deſtructive to deer, which it will ſeize between the horns, and by inceſſantly beating it about the eyes with its wings, ſoon makes a prey of the haraſſed animal. The eagles in the iſle of *Rum* have nearly extirpated the ſtags that uſed to abound there. This ſpecies generally builds in clefts of rocks near the deer makes foreſts; and great havoke not only among them, but alſo the white hares and *Ptarmigans*.

It is equal in ſize to the preceding: the bill is of a blackiſh horn color; the cere yellow; the whole body is of a deep brown, ſlightly tinged with ruſt color; but what makes a long deſcription of this kind unneceſſary, is the remarkable band of white on the upper part of the tail; the end only being of a deep brown: which character it maintains through every ſtage of life, and in all countries where it is found. The legs are feathered to the feet: the toes yellow, the claws black. Mr. *Willughby* gives the following very curious account of the neſt of this ſpecies, p. 21.

NEST.

'In the year of our Lord 1668, in the woodlands near the river '*Derwent*, in the *Peak* of *Derbyſhire*, was found an eagle's neſt 'made of great ſticks, reſting one end on the edge of a rock, the 'other on two birch trees; upon which was a layer of ruſhes, and 'over them a layer of heath, and upon the heath ruſhes again; 'upon which lay one young one, and an addle egg; and by 'them a lamb, a hare, and three heath poults. The neſt was 'about two yards ſquare, and had no hollow in it. The young 'eagle was black as a hobby, of the ſhape of a goſhawk, of almoſt 'the weight of a gooſe, rough footed, or feathered down to the 'foot: having a white ring about the tail.'

Mr. *Willughby* imagines, his firſt *pygargus*, or white tailed eagle,

p. 61. to be but a variety of this, having the ſame characteriſtic mark, and differing only in the pale color of the head.

The antients believed, that the pebble, commonly called the *ætites**, or eagle ſtone, was formed in the eagle's neſt; and that the eggs could not be hatched without its aſſiſtance. Many abſurd ſtories have been raiſed about this foſſil, which (as it bears but an imaginary relation to the eagle) muſt be omitted in a zoologic work.

44. SEA EAGLE.

Bein-brecher, Offifraga, Meer-adler, Fiſch-arn, Haliætos. *Geſner av.* 201. 203.
Haliætos. *Turneri.*
Auguiſta barbata, Offifraga. *Aldr. av.* i. 118.
Haliætos. *Plinii lib.* 10. *c.* 3.
*Sib. hiſt. Scot.* 14.
Sea eagle, or oſprey. *Wil. orn.* 59.
*Raii ſyn. av.* 7.
Sea eagle. *Dale's Harwich.* 396.
*Martin's hiſt. Weſt. iſles* 70.
Le grand aigle de mer. *Briſſon av.* i. 437.
Sea eagle. *Br. Zool.* 63. *Pl. Enl.* 112. 415.
Falco offifragus. *Lin. ſyſt.* 124.
Gaaſe orn. *Brunnich* 13.
L'Orfrair. *Hiſt. d'oys.* I. 112.

THIS ſpecies is found in *Ireland*, and ſeveral parts of *Great-Britain*; the ſpecimen we took our deſcription from, was ſhot in the county of *Galway*; Mr. *Willughby* tells us there was an aery of them in *Whinfield-park*, *Weſtmoreland*; and the eagle ſoaring in the air, with a cat in its talons, which *Barlow* drew from the

* If the reader's curioſity ſhould be excited, we refer him for information to *Pliny*, lib. x. c. 3. lib. xxx. c. 21. to *Boetius de gemmis*, p. 375. to Dr. *Woodward*'s catalogue of foſſils, vol. i. p. 53. c. 268, 269. and *Grew*'s *Rarities*, p. 297.

very

## SEA EAGLE.

M. Griffiths del

very fact which he ſaw in *Scotland**, is of this kind. The cat's reſiſtance brought both animals to the ground, when *Barlow* took them up; and afterwards cauſed the event to be engraved in the thirty-ſixth plate of his collection of prints. *Turner* ſays, that in his days, it was too well known in *England*, for it made horrible deſtruction among the fiſh; he adds, the fiſhermen were fond of anointing their baits with the fat of this bird, imagining that it had a peculiar alluring quality: they were ſuperſtitious enough to believe that whenever the *ſea eagle* hovered over a piece of water, the fiſh, (as if charmed) would riſe to the ſurface with their bellies upwards; and in that manner preſent themſelves to him. No writer ſince *Cluſius* has deſcribed the ſea eagle; though no uncommon ſpecies, it ſeems at preſent to be but little known; being generally confounded with the golden eagle, to which it bears ſome reſemblance.

The color of the head, neck and body, are the ſame with the latter; but much lighter, the tawny part in this predominating: in ſize it is far ſuperior; the extent of wings in ſome being nine or ten feet. The bill is larger, more hooked, and more arched; underneath grow ſeveral ſhort, but ſtrong hairs or briſtles, forming a ſort of beard. This gave occaſion to ſome writers to ſuppoſe it to be the *aquila barbata* or bearded eagle of *Pliny*. The interior ſides, and the tips of the feathers of the tail, are of a deep brown; the exterior ſides of ſome are ferruginous, in others blotched with white. The legs are yellow, ſtrong and thick; and feathered but little below the knees; which is an invariable ſpecific difference between DESCRIP.

* Mr. *Walpole's* catalogue of engravers, p. 49.

this and our firſt ſpecies. This nakedneſs of the legs is beſides no ſmall convenience to a bird who preys among the waters. The claws are of a deep and ſhining black, exceedingly large and ſtrong, and hooked into a perfect ſemicircle; thoſe of the hind and firſt toe are an inch and a half long.

Food. All writers agree, that this eagle feeds principally on fiſh; which it takes as they are ſwimming near the ſurface *, by darting itſelf down on them; not by diving or ſwimming, as ſeveral authors have invented, who furniſh it for that purpoſe with one webbed foot to ſwim with, and another divided foot to take its prey with. *Pliny*, with his uſual elegance, deſcribes the manner of its fiſhing. *Supereſt haliæetos, clariſſima oculorum acie, librans ex alto ſeſe, viſoque in mari piſce, præceps in eum ruens, et diſcuſſis pectore aquis rapiens.*

It alſo preys on water fowl. The ſame writer prettily deſcribes the chace, an amuſement the inhabitants near the large lakes formed by the *Shannon* frequently enjoy.

It is ſtrange that authors ſhould give the name of *Niſus* to the ſparrow hawk, when *Ovid* expreſsly mentions this as the bird to which the father of *Scylla* was transformed.

> Quam pater ut vidit (nam jam pendebat in auras
> Et modo factus erat fulvis Haliæetos alis)
> Ibat, ut hærentem roſtro laniaret adunco.

* *Martin*, ſpeaking of what he calls the great eagles in the weſtern iſles, ſays, that they faſten their talons in the back of the fiſh, commonly of ſalmon, which are often above water, or on the ſurface. Thoſe of *Greenland* will even take a young ſeal out of the water.

A hawk

Pl. XVIII. CINEREOUS EAGLE. No. 45.

Paillou pinx^t Mazell Fec^t

A hawk from upper air came pouring down,
('Twas *Niſus* cleft the air with wings new grown.)
At *Scylla*'s head his horny bill he aims.

*Croxal.*

Pygargus, or white tailed eagle. *Will. orn.* 61.
*Raii ſyn. av.* 7. *Briſſon* 1. 427.
Ern. *Br. Zool. Pl. Enl.* 411.
*Hiſt. d'Oys.* 1. 99.

Pygargus hinnularius, an *Erne. Sib. Scot.*
Vultur albiulla. *Lin. ſyſt.* 123.
Braunfahle Adler. *Friſch* I. 70.
Gamſen geyer. *Kram.* 326.
Poſtoina. *Scopoli* No. 2.

45. CINEREOUS.

DESCRIP. IS inferior in ſize to the golden eagle: the beak, cere and irides are of a very pale yellow; the ſpace between that and the eyes bare, and of a bluiſh color. The head and neck are of a pale aſh-color: the body and wings cinereous clouded with brown, the quil feathers very dark: the tail white: the legs feathered but little below the knees, and of a very light yellow. The male is of a darker color than the female.

The bill of this is rather ſtraiter than is uſual in the eagle, which ſeems to have induced *Linnæus* to place it among the *vultures*; but it can have no clame to be ranked with that genus, for the *pygargus* is wholly feathered; whereas, the characteriſtical mark of the

vulture is, that the head and neck are either quite bare, or only covered with down.

Inhabits *Scotland*, and the *Orknies*, and feeds on fiſh, as well as on land animals.

## FALCONRY.

Falconry was the principal amuſement of our anceſtors: a perſon of rank ſcarce ſtirred out without his hawk on his hand; which, in old paintings, is the criterion of nobility. *Harold*, afterwards king of *England*, when he went on a moſt important embaſſy into *Normandy*, is painted embarking with a bird on his fiſt, and a dog under his arm *: and in an antient picture of the nuptials of *Henry* VI. a nobleman is repreſented in much the ſame manner †; for in thoſe days, *It was thought ſufficient for noblemen's ſons to winde their horn and to carry their hawk fair, and leave ſtudy and learning to the children of mean people* ‡. The former were the accompliſhments of the times; *Spenſer* makes his gallant Sir *Triſtram* boaſt,

> Ne is there hauke which mantleth her on pearch,
> Whether high towring, or accoaſting low,
> But I the meaſure of her flight doe ſearch,
> And all her pray, and all her diet know ||.

* *Monfaucon monumens de la monarchie francoiſe*, I. 372.

† *Mr. Walpole's anecdotes of painting*, I. 33.

‡ *Biog. Brit.* article *Caxton*.

|| *Book* VI. *Canto* 2.

In

In ſhort, this diverſion was, among the old *Engliſh*, the pride of the rich, and the privilege of the poor, no rank of men ſeems to have been excluded the amuſement: we learn from the *book* of *St. Albans**, that every degree had its peculiar hawk, from the *emperor* down to the *holy water clerk*. Vaſt was the expence that ſometimes attended this ſport; in the reign of *James* I. Sir *Thomas Monſon* † is ſaid to have given a thouſand pounds for a caſt of hawks: we are not then to wonder at the rigor of the laws that tended to preſerve a pleaſure that was carried to ſuch an extravagant pitch. In the 34th of *Edward* III. it was made felony to ſteal a hawk: to take its eggs, even in a perſon's own ground, was puniſhable with impriſonment for a year and a day; beſides a fine at the king's pleaſure: in queen *Elizabeth*'s reign the impriſonment was reduced to three months; but the offender was to find ſecurity for his good behaviour for ſeven years, or lie in priſon till he did. Such was the enviable ſtate of the times of *old England*: during the whole day our gentry were given to the fowls of the air, and the beaſts of the field: in the evening they celebrated their exploits with the moſt abandoned and brutiſh ſottiſhneſs: at the ſame time the inferior rank of people, by the moſt unjuſt and arbitrary laws, were liable to capital puniſhments, to fines, and loſs of liberty, for deſtroying the moſt noxious of the feathered tribe.

According to *Olearius*, the diverſion of falconry is more followed by the *Tartars* and *Perſians*, than ever it was in any part of *Europe*. *Il n'y avoit point de hutte qui n'euſt ſon aigle ou ſon faucon* ‡.

* A treatiſe on hunting, hawking and heraldry, printed at *St. Albans* by *Caxton*, and attributed to *Dame Julian Barnes*.

† Sir *Ant. Weldon*'s court of K. *James*. 105.

‡ *Tom.* I. 217. 328.

Our anceſtors made uſe of ſeveral kinds of native hawks; though that penetrating and faithful naturaliſt Mr. *Ray*, has left us only the bare name of a falcon in his liſt of the *Engliſh* birds, without mentioning the ſpecies.

The falcons or hawks that were in uſe in theſe kingdoms, are now found to breed in *Wales*, and in *North-Britain*, and its iſles. The peregrine falcon inhabits the rocks of *Caernarvonſhire*. The ſame ſpecies, with the *gyrfalcon*, the *gentil*, and the *goſhawk* are found in *Scotland*, and the *lanner* in *Ireland*.

We may here take notice that the *Norwegian* breed was, in old times, in high eſteem with our countrymen: they were thought bribes worthy a king. *Jeoffrey Fitzpierre* gave two good *Norway* hawks to king *John*, to obtain for his friend the liberty of exporting 100 weight of cheeſe: and *Nicholas* the *Dane* was to give the king a hawk every time he came into *England*, that he might have free liberty to traffick throughout the king's dominions *.

They were alſo made the tenures that ſome of our nobility held their eſtates by, from the crown. Thus Sir *John Stanley* had a grant of the *Iſle of Man* from *Henry* IV. to be held of the king, his heirs and ſucceſſors, by homage and the ſervice of two falcons, payable on the day of his or their coronation †. And *Philipp* de *Haſtang*, held his manour of *Combertoun*, in *Cambridgeſhire*, by the ſervice of keeping the king's falcons ‡.

* *Madox* antiq. exchequer, I. 469, 470.

† *Blunt*'s antient tenures. 20.

‡ *Madox* I. 652.

Une

Une Orfraye. *Belon. av.* 96.
Fiſch-adler, Maſſwy, Aquila anataria, Clanga, Planga, Percnos, Morphnos. *Geſner. av.* 196.
Haliætus, ſeu aquila marina. *Geſner av.* 804.
Balbuſhardus, *Turneri.*
Auguiſta piumbina, Aquilaſtro, Haliætus, ſeu Morphnos. *Aldr. av.* I. 105. 114.
Haliætus. *Caii opuſc.* 85.
Bald Buzzard. *Wil. orn.* 69.
Bald Buzzard, or ſea eagle. *Raii syn. av.* 16. 46. OSPREY.
Fiſhing hawk. *Cateſby's Carol.* I. *Tab.* 2.
Falco cyanopus. *Klein Stem. Tab.* 8.
Falco Haliætus. *Lin. ſyſt.* 129.
Blafot, Fiſk-orn. *Faun. Suec. ſp.* 63.
Aigle de mer. *Briſſon av.* I. 440. *Tab.* 34. *Hiſt. d'Oys.* I. 103.
The Oſprey. *Br. Zool.* 63. *Tab.* A. 1. *Pl. Enl.* 414.
Fiſk-oern. *Brunnich*, p. 5.

MR. *Ray* places this bird among the hawks, inſtead of the eagles, on a ſuppoſition that Mr. *Willughby* had exceeded in his account of its weight; but as we had an opportunity of confirming the words of the latter, from one of this ſpecies juſt taken, we here reſtore it to the aquiline rank, under the name of the Oſprey: which was the name it was known by in *England* above one hundred and ſixty years ago; as appears by Dr. *Kay*, or *Caius*'s deſcription of it, who alſo calls it an eagle.

This bird haunts rivers, lakes, and the ſea ſhores. It builds its neſt on the ground among reeds, and lays three or four white eggs of an elliptical form; rather leſs than thoſe of a hen. It feeds chiefly on fiſh *, taking them in the ſame manner as the ſea eagle does, by precipitating itſelf on them, not by ſwimming; its feet being formed like thoſe of other birds of prey, for the left

NEST.

FOOD.

* *Turner* ſays it preys alſo on coots, and other water fowl.

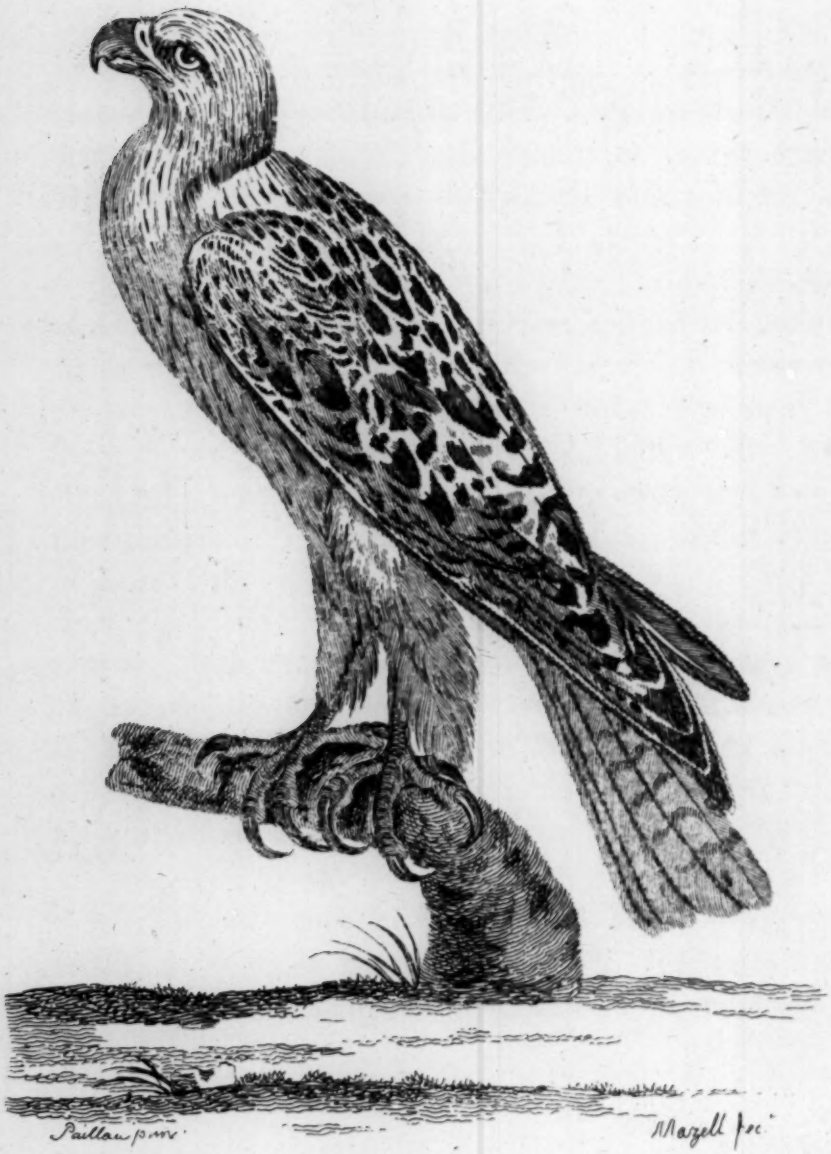
is

is not at all palmated, as ſome, copying the errors of antient writers, aſſert it to be. The *Italians* compare the violent deſcent of this bird on its prey, to the fall of lead into water, and call it, *Auguiſta piumbina*, or the *leaden eagle*.

Descrip. The bird here deſcribed was a female; its weight was ſixty-two ounces: the length twenty-three inches: the breadth five feet four inches: the wing when cloſed reached beyond the end of the tail: that, as in all the hawk kind, conſiſts of twelve feathers: the two middle feathers were duſky; the others barred alternately on their inner webs with brown and white: on the joint of the wing next the body was a ſpot of white: the quil feathers of the wings were black; the ſecondary feathers and the coverts duſky, the former having their interior webs varied with brown and white:

Head. the inner coverts white ſpotted with brown. The head ſmall and flat, the crown white marked with oblong duſky ſpots. The cheeks, chin, belly and breaſt white, the laſt ſpotted with a dull yellow: from the corner of each eye is a bar of brown that extends along

Legs. the ſides of the neck pointing towards the wing. The legs very ſhort, thick and ſtrong: their length being only two inches and a quarter; their circumference two inches: their color a pale blue: the outward toe turns eaſily backwards, and what merits attention, the claw belonging to it is larger than that of the inner toe; in which it differs from all other birds of prey; but ſeems peculiarly neceſſary to this kind, for better ſecuring its ſlippery prey: the roughneſs of the ſoles of the feet contributes to the ſame end. The difference in weight, and other trifling particulars, makes us imagine that the bird Mr. *Willughby* ſaw was a male; as the females of all the hawk kind, are larger, ſtronger,


Pallas pinx.
Mazell fec.

er, and fiercer than the males; the defence of their young, and the providing them food, reſting chiefly on them.

Le Gerfault. *Belon av.* 94
Gyrfalco. *Aldr. av.* I. 243.
Jer-falcon. *Wil. orn.* 78.
Gyrfalco. *Raii ſyn. av.* 13.
White Falcon. *Wil. orn.* 80.
F. Iſlandus albus. *Brunnich* 7. 8.
Le Gerfault. *Briſſon av.* I. 370.
*Sib. Scot.* 14.
*Charlton Ex.* 317.

47. GYRFALCON.

THIS elegant ſpecies is not much inferior in ſize to the *Oſprey*. The *irides* duſky: the bill is very much hooked and yellow. The throat is of a pure white: the whole plumage of the ſame color, but marked with duſky lines, ſpots or bars: the head, breaſt and belly with narrow lines, thinly ſcattered and pointing down: the wings with large heart-ſhaped ſpots: the middle feathers of the tail with a few bars: the feathers on the thighs are very long, and of a pure white; the legs of a pale blue, and feathered a little below the knees. This kind is ſometimes found quite white: it was a bird in high eſteem when falconry was in vogue, and uſed for the nobleſt game, ſuch as cranes and herons.

DESCRIP.

This is the *Gyrfalco* of all the ornithologiſts except *Linnæus*, whoſe bird we are totally unacquainted with: though he gives ſeveral of their ſynonyms, his deſcription differs entirely from each of them. Inhabits the north of *Scotland*; ſhot near *Aberdeen*.

*Belon*

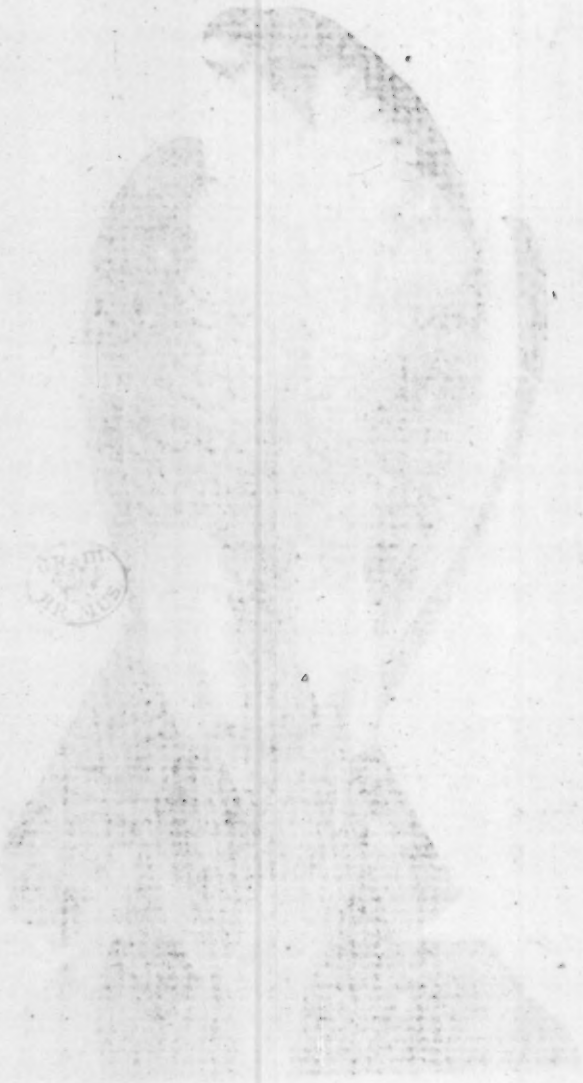
48. Peregrine.
*Belon av.* 116.
Falco peregrinus niger. *Aldr. av.* I. 239.
Blue backed falcon. *Charl. Ex.* 73.
Ditto. *Br. Zool. Tab.* A * 5.
Sparviere pellegrino femmina. *Lorenzi av. Tab.* 24.
Le Faucon pelerin. *Briſſon av.* I. 341. *Hiſt. d'Oys.* I. 249.

Descrip. In ſize equal to the moor-buzzard: the bill ſtrong, ſhort, and very much hooked, armed near the end of the upper mandible with a very ſharp proceſs: blue at the baſe, black at the point: the irides duſky.

The feathers on the forehead whitiſh: the crown of the head black mixed with blue: the hind part of the neck black: the back, ſcapulars, and coverts of the wings, elegantly barred with deep blue and black. The quil feathers duſky, marked with elliptical white ſpots placed tranſverſe: the inner coverts croſſed with black and white bars: the throat white: the fore part of the neck, and upper part of the breaſt white ſlightly tinged with yellow, the laſt marked with a few ſmall duſky lines pointing downwards. The reſt of the breaſt, the belly, thighs and vent feathers, white inclining to grey, and croſſed with duſky ſtrokes pointed in their middle. The tail conſiſts of feathers of equal length, finely and frequently barred with blue and black. The legs ſhort and yellow: the toes very long.

This ſpecies ſeems to vary: we have ſeen one that was ſhot in *Hampſhire*

## PEREGRINE FALCON.



*Hampſhire*, juſt as it had ſtruck down a *Rook* and was tearing it to pieces. The whole under ſide of the body was of a deep dirty yellow, but the black bars were the ſame as in that above deſcribed. The weight of this was two pounds eight ounces; the breadth thirty eight inches.

This ſpecies breeds on the rocks of *Llandidno* in *Caernarvonſhire*. That promontory has been long famed for producing a generous kind, as appears by a letter extant in *Gloddaeth* library, from the lord treaſurer *Burleigh* to an anceſtor of Sir *Roger Moſtyn*, in which his lordſhip thanks him for a preſent of a fine caſt of hawks taken on thoſe rocks, which belong to the family. They are alſo very common in the north of *Scotland*; and are ſometimes trained for falconry by ſome few gentlemen who ſtill take delight in this amuſement in that part of *Great Britain*. Their flight is amazingly rapid: one that was reclamed by a gentleman in the ſhire of *Angus*, a county on the eaſt ſide of *Scotland*, eloped from his maſter with two heavy bells to each foot, on the twenty-fourth of *September* 1772, and was killed in the morning of the twenty-ſixth, near *Moſtyn*, *Flintſhire*.

Grey Falcon. *Br. Zoology* 65. *Octavo* I. 137. 49. GREY.

THIS kind was ſhot near *Halifax* 1762, and the following account tranſmitted to us by Mr. *Bolton*, of *Worly-clough*. This bird was about the ſize of a raven: the bill was ſtrong, ſhort, much hooked, and of a bluiſh color: the cere, and edges of the eye-lids yellow: DESCRIP.

yellow: the irides red: the head was ſmall, flatted at the top; the fore part of a deep brown; the hind part white: the ſides of the head and throat were creme colored: the belly white, marked with oblong black ſpots: the hind part of the neck, and the back were of a deep grey: the wings were very long, and when cloſed reached beyond the train: the firſt of the quil feathers were black, with a white tip; the others were of a bluiſh grey, and their inner webs irregularly ſpotted with white: the tail was long, and wedge ſhaped; the two middle feathers being the longeſt, were plain, (the color not mentioned) the reſt ſpotted: the legs were long, naked, and yellow.

50. Gentil. Gentil Falcon. *Wil. orn.* 80. *Raii ſyn. av.*
Falco gentilis. F. cere pedibusque flavis, corpore cinereo maculis fuſcis, cauda fuſcis quatuor nigricantibus. *Lin. ſyſt.* 126.
Falk. *Faun. Suec.* ſp. 58. *Kram. Auſtr.* 328.
Falco gentilis *Brun.* No. 6. *Scopoli*, No. 3.
L'Autour. *Hiſt d'Oys.* 1. 230.

Descrip. THIS ſpecies of an elegant make is larger than the goſhawk. Cere, and legs yellow; irides light yellow: pupil large and of a full black: head light ruſt color, with oblong black ſpots: whole under ſide from chin to tail white, tinged with yellow: each feather marked with heartſhaped duſky ſpots pointing down: back brown: quil feathers duſky; barred on the out-moſt web with black, on the lower part of the inner with white. Coverts of the wings, and the ſcapulars, brown edged with ruſt color: wings reach only one half the length of the tail. The tail barred with four or five bars of black, and the ſame of cinereous: the firſt edged above and

FALCON GENTIL.

# FALCON GENTIL.

*a Variety*

# LANNER.

and below with a line of dull white. The very tips, all the tail feathers white.

The young birds vary in having on their breaſts tranſverſe bars inſtead of cordated ſpots, as in the ſpecimen, *Plate*

This ſpecies inhabits the north of *Scotland*; and was in high eſteem as a bold and ſpirited bird in the days of falconry. It makes its neſt in rocks.

The Lanner. *Wil. orn.* 82.
Lanarius. *Raii. ſyn. av.* 15.

Falco Lanarius. *Lin. ſyſt.* 129.
*Faun. Suec. ſp.* 62.

51. LANNER.

THIS ſpecies breeds in *Ireland:* the bird our deſcription is taken from, was caught in a decoy in *Lincolnſhire*, purſuing ſome wild ducks under the nets, and communicated to us by *Taylor White* Eſq; under the name of the *Lanner*.

It was leſs than the buzzard. The cere was of a pale greeniſh blue; the crown of the head of a brown and yellow clay color: above each eye, to the hind part of the head, paſſed a broad white line; and beneath each, a black mark pointing down: the throat white: the breaſt tinged with dull yellow, and marked with brown ſpots pointing downwards: the thighs and vent ſpotted in the ſame manner: back and coverts of the wings deep brown, edged with a paler: quil feathers duſky: the inner webs marked with oval ruſt colored ſpots: the tail was ſpotted like the wings. DESCRIP.

The legs ſhort and ſtrong, and of a bluiſh caſt, which Mr. *Willughby* ſays, are the characters of that bird. We are here to obſerve,

that much caution is to be uſed in deſcribing the hawk kind, no birds being ſo liable to change their colors the two or three firſt years of their lives: inattention to this has cauſed the number of hawks to be multiplied far beyond the reality. The marks to be attended to as forming the characters of the ſpecies, are thoſe on the quil feathers and the tail, which do not change. Another reaſon for this needleſs increaſe of the ſpecies of this tribe of birds, is owing to the names given to the ſame kinds in different periods of their lives, by the writers on falconry, which ornithologiſts have adopted and deſcribed as diſtinct kinds: even Mr. *Ray* has been obliged to copy them. The falcon, the falcon gentil, and the haggard, are made diſtinct ſpecies, whereas they form only one: this is explained by a *French* author, who wrote in the beginning of the laſt century, and effectually clears up this point; ſpeaking of the falcon, he tells us, " S'il eſt prins en *Juin*, *Juillet* & *Aouſt*, " vous le nommerez *Gentil:* ſi en *Septembre*, *Octobre*, *Novembre* ou " *Decembre*, vous le nommerez *Pellerin* ou *Paſſager:* s'il eſt prins " en *Janvier*, *Feburier* et *Mars*, il ſera nommé *Antenere:* et apres " eſtre muë une fois et avoir changé ſon cerceau, non auparavant, " vous le dires *Hagar*, mot *Hebrieu*, qui ſignifie eſtranger *."

* *La fauconnerie de Charles d'Arcuſſia ſeigneur d'Eſparron, p.* 14. 5*me edit. Paris* 1607.

G.R.III
BR. MUS.

Paulton pinx.
Mazell fecit

Autour. *Belon av.* 112.
*Geſner av.* 5.
*Aldr. av.* i. 181.
*Sib. Scot.* 15.
Goſhawk, accipiter palumbarius. *Wil. av.* 85.
*Raii ſyn. av.* 18.
L'Atour, Aſtur. *Briſſon av.* i. 317.
Groſſer gepfeilter Falck. *Friſch.* I. 82.
Aſtore. *Zinan* 87.
Falco palumbarius. *Lin. ſyſt.* 130.

52. GOSHAWK.

DESCRIP. THE goſhawk is larger than the common buzzard, but of a longer and more elegant form. The bill is blue towards the baſe, black at the tip: the cere a yellowiſh green: over each eye is a white line; and on the ſide of the neck is a bed of broken white: the head, hind part of the neck, back and wings are of a deep brown color: the breaſt and belly white, beautifully marked with numerous tranſverſe bars of black and white: the tail is long, of a browniſh aſh-color, marked with four or five duſky bars placed remote from each other.

The legs are yellow: the claw of the back, and that of the inner toe very large and ſtrong.

This ſpecies and the ſparrow hawk, are diſtinguiſhed by Mr. *Willughby* by the name of ſhort winged hawks, becauſe their wings, when cloſed, fall ſhort of the end of the tail.

The goſhawk was in high eſteem among falconers, and flown at cranes, geeſe, pheaſants and partridges. It breeds in *Scotland*, and builds its neſt in trees; is very deſtructive to game, and daſhes through the woods after its quarry with vaſt impetuoſity; but if it cannot catch the object of its purſuit almoſt immediately, deſiſts, and perches on a bough till ſome new game preſents itſelf.

Le

53. KITE.

Le Milan royal. *Belon av.* 129.
Milvus. *Geſn. av.* 609.
Glede, Puttok, Kyte *Turneri.*
Milvio, Nichio. *Ald. av.* i. 201.
Kite, or Glead. *Wil. orn.* 74.
Milvus. *Plinii lib.* x. *c.* 10.
*Raii ſyn. av.* 17.
Rother Milon. *Kram.* 326.
Falco milvus. *Lin. ſyſt.* 126.
Glada. *Faun. Suec. ſp.* 57.
Le Milan royal. *Briſſon av.* i. 414. *Tab.* 33. *Hiſt. d'Oys.* 1. 197.
Nibbio. *Zinan.* 82.
The Kite. *Br. Zool.* 66. *Tab.* A. 2. *Pl. Enl.* 422.
Glente. *Brunnich* 3.

THE kite generally breeds in large foreſts, or wooded mountanous countries: its neſt is made externally with ſticks, lined with ſeveral odd materials, ſuch as rags, bits of flannel, rope, and paper. It lays two, or at moſt three eggs: which, like thoſe of other birds of prey, are much rounded, and blunt at the ſmaller end; they are white, ſpotted with a dirty yellow. Its motion in the air diſtinguiſhes it from all other birds; being ſo ſmooth and even, as to be ſcarce perceptible; ſometimes it will remain quite motionleſs for a conſiderable ſpace; at others glides through the ſky, without the leaſt apparent action of its wings: from thence is derived the old name of Glead, or Glede, from the *Saxon* Glida. Lord *Bacon* obſerves, that when kites fly high, it portends fair and dry weather. Some have ſuppoſed theſe to be birds of paſſage; but in *England* they certainly continue the whole year. *Cluſius* relates* that when he was in *London*, he obſerved a moſt amazing number of kites that flocked there for the ſake of the offals, &c. which were flung in the ſtreets. They were ſo tame as to take their prey

* *Belon obſ. ad finem Clus. exot.* 108.

in

in the midſt of the greateſt crowds; and it was forbidden to kill them.

The tail of this kind is ſufficient to diſtinguiſh it from all other *Britiſh* birds of prey, being forked. *Pliny* thinks that the invention of the rudder aroſe from the obſervation men made of the various motions of that part, when the kite was ſteering through the the air *. Certain it is that that the moſt uſeful arts were originally copied from animals; however we may now have improved upon them. Still in thoſe nations which are in a ſtate of nature, (ſuch as the *Samoieds* and *Eſquimaux*) their dwellings are inferior to thoſe of the beavers, which thoſe ſcarcely human beings but poorly copy.

DESCRIP. The weight of this ſpecies is forty-four ounces: the length twenty-ſeven: the breadth five feet one inch. The bill is two inches long, and very much hooked at the end: the cere yellow: *irides* of a ſtraw-color. The head and chin are of a light grey, in ſome, white, marked with oblong ſtreaks of black: the neck and breaſt are of a tawny red, but the middle of the feathers black. On the belly and thighs, the ſpots are fewer, and under the tail they almoſt vaniſh. The upper part of the back is brown, the middle covered with very ſoft white down. The five firſt quil feathers are black; the inner webs of the others duſky barred with black, and the lower edges white. The coverts of the wings are varied with tawny black and white: the tail is forked, and of a tawny red: the outmoſt feather on each ſide of a darker hue than the reſt; and marked with a few obſcure duſky ſpots: the thighs are covered with very long feathers: the legs are yellow and ſtrong.

* Iidem videntur artem gubernandi docuiſſe caudæ flexibus. *Lib.* x. *c.* 10.

Theſe

Theſe birds differ in their colors. We have ſeen a beautiful variety ſhot in *Lincolnſhire* that was entirely of a tawny color.

54. BUZZARD.

Le Buſe, ou Buſard. *Belon av.* 100.
Buteo. *Geſner. av.* 46.
Buſharda *Turneri.*
Buteo, ſeu Triorches. *Ald. av.* I. 190.
Triorches, Buteo. *Plinii lib.* x. c. 7.
*Raii ſyn. av.* 16.
Common Buzzard, or Puttock. *Wil. orn.* 70.
Wald Geyer. *Kram.* 329.
Falco buteo. *Lin. ſyſt.* 127.
Quidfogel. *Faun. Suec. ſp.* 60.
La Buſe. *Briſſon av.* I. 406. *Hiſt. d'oyſ.* I. 206.
Pojana. *Zinan.* 85. *Scopoli.* No. 4.
*Br. Zool.* 66. *Tab.* A. 3. *Pl. Enl.* 419.
Oerne Falk. *Brunnich* p. 5.

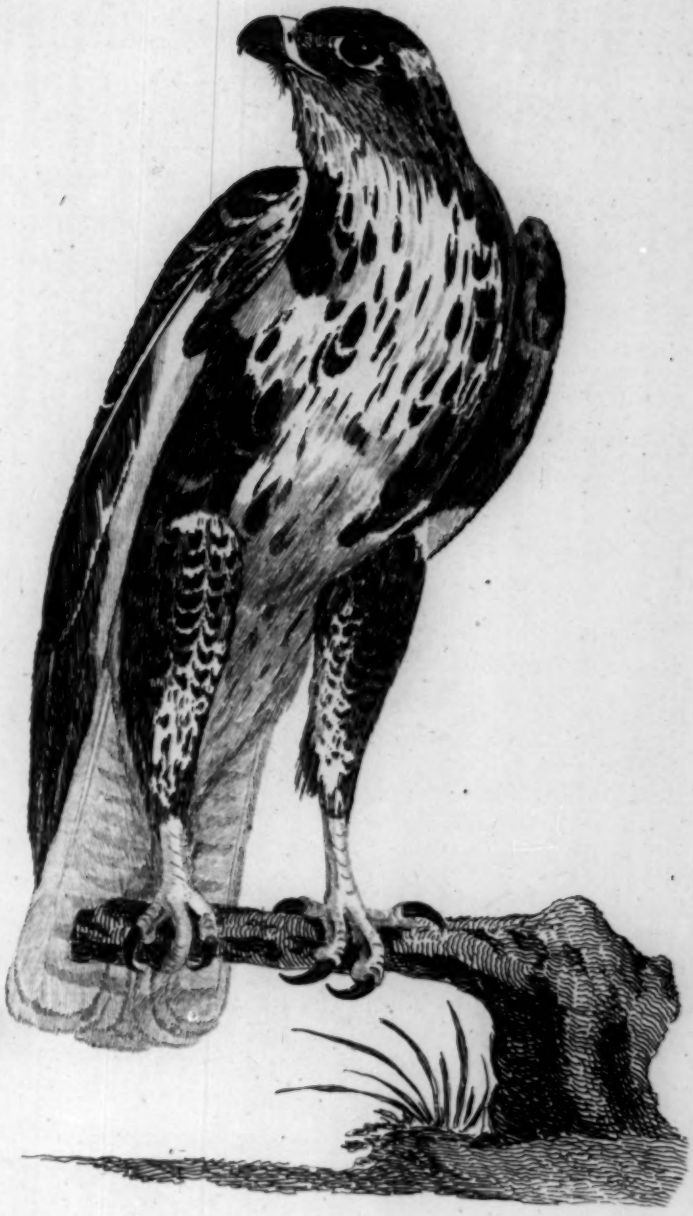
THIS bird is the commoneſt of the hawk kind we have in *England.* It breeds in large woods, and uſually builds on an old crow's neſt, which it enlarges and lines with wool, and other ſoft materials: it lays two or three eggs, which are ſometimes wholly white; ſometimes ſpotted with yellow. The cock buzzard will hatch and bring up the young, if the hen is killed *. The young conſort with the old ones for ſome little time after they quit the neſt; which is not uſual with other birds of prey, who always drive away their brood as ſoon as they can fly. This ſpecies is very ſluggiſh and inactive; and is much leſs in motion than other hawks, remaining perched on the ſame bough for the greateſt part of the day, and is found at moſt times near the ſame place. It feeds on birds, rabbets, moles and mice; it will alſo eat frogs, earth-worms and inſects.

DESCRIP. This bird is ſubject to ſome variety in its colors: we have ſeen ſome whoſe breaſt and belly were brown, and only mark-

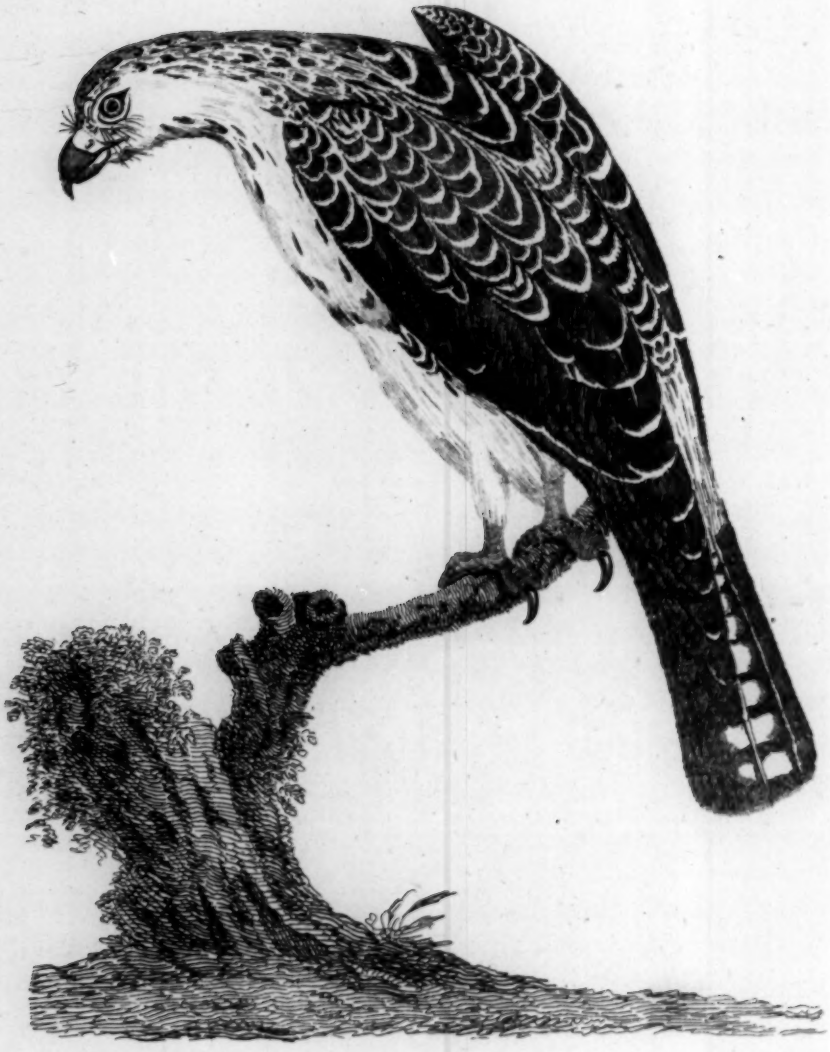
* *Ray's Letters.* 352.

ed

# BUZZARD.



# SPOTTED FALCON.



ed croſs the craw with a large white creſcent: uſually the breaſt is of a yellowiſh white, ſpotted with oblong ruſt-colored ſpots, pointing downwards: the chin ferruginous: the back of the head and neck, and the coverts of the wings are of a deep brown, edged with a pale ruſt color: the ſcapular feathers brown; with white towards their roots: the middle of the back is covered only with a thick white down: the ends of the quil feathers are duſky: their lower exterior ſides aſh-colored: their interior ſides blotched with darker and lighter ſhades of the ſame: the tail is barred with black and aſh-color, and ſometimes with ferruginous: the bar next the very tip is black, and the broadeſt of all; the tip itſelf of a duſky white. The *irides* are white, tinged with red. The weight of this ſpecies is thirty-two ounces: the length twenty-two inches; the breadth fifty-two. SIZE.

Spotted Falcon, *Br. Zool.* iv. *tab.* 11. 55. SPOTTED.

TWO of theſe birds have been ſhot near *Longnor*, *Shropſhire*.

Size of a buzzard: bill black; cere and legs yellow: irides pale yellow: crown, and hind part of the neck white, ſpotted with light reddiſh brown: back and ſcapulars of the ſame color edged with white. Quil feathers duſky barred with aſh color.

Under ſide of the neck, breaſt, belly, and thighs, white; the firſt, alſo the beginning of the breaſt marked with a few ruſty ſpots: rump white: middle feathers of the tail barred with white, and a

deep brown: the others with a lighter and darker brown. The legs very ſtrong.

50. HONEY BUZZARD.

Le Goiran, ou Bondrèe. *Belon av.* 101.
*Ald. av.* 1. 191.
Honey-Buzzard. *Wil. orn.* 72.
*Raii ſyn. av.* 16.
Froſch-geyerl. *Kram.* 331.
Falco Apivorus. *Lin. ſyſt.* 130.
Slag-hok. *Faun. Suec. ſp.* 65.
La Bondrèe. *Briſſon av.* i. 410. *Hiſt. d'Oys.* I. 208.
*Zinan.* 84.
*Br. Zool.* 67. *Tab.* A. 4. A*. 4. *Pl. Enl.* 420.
Muſe-Hoeg, Muſe-Baage, *Brunnich* p. 5.

DESCRIP. THE weight of this ſpecies is thirty ounces: the length twenty-three inches: the breadth fifty-two: the bill and cere are black; the latter much wrinkled: the irides of a fine yellow: the crown of the head aſh-colored: the neck, back, ſcapulars, and covert feathers of the wings, are of a deep brown: the chin is white; the breaſt and belly of the ſame color, marked with duſky

TAIL. ſpots pointing downwards. The tail is long, of a dull brown color, marked with three broad duſky bars; between each of which are two or three of the ſame color, but narrower: the legs are ſhort, ſtrong, and thick: the claws large and black.

After the publication of the *folio Zoology*, Mr. *Plymly* favored us with a variety of this ſpecies, engraved in the additional plates, ſuppoſed to be a female, being ſhot on the neſt: it was entirely of a deep brown color, but had much the ſame marks on the wings and tail as the male; and the head was tinged with aſh color.

EGGS. There were two eggs in the neſt, blotched over with two reds ſomething darker than thoſe of the keſtril; though Mr. *Willughby* ſays they are of a different color: that naturaliſt informs us, that this bird

# MOOR BUZZARD.

bird builds its neſt with ſmall twigs, which it covers with wool; that its eggs are cinereous, marked with darker ſpots: as he found the combs of waſps in the neſt, he gave this ſpecies the name of the honey-buzzard: he adds, that it feeds on the erucæ of thoſe inſects, on frogs, lizards, *&c.* and that it runs very ſwiftly like a hen.

Le ſau-Perdrieux. *Belon av.* 114.
Circus Accipiter. *Geſner av.* 49.
Milvus æruginoſus. *Ald. av.* i. 203.
Moor Buzzard. *Wil. orn.* 75.
*Raii ſyn. av.* 17.
Brauner rohr Geyer. *Kram.* 328.
Falco æruginoſus. *Lin. ſyſt.* 91.
Hoenſ-tjuf. *Faun. Suec. ſp.* 66.
Pojana roſſa. *Zinan.* 83.
Le Buſard de marais. *Briſſon av.* i. 401.
*Hiſt. d'Oys.* 1. 218.
Schwartz-brauner Fiſch-Geyer mit dem gelben Kopf. *Friſch.* I. 77.
Hoenſe Hoeg. *Brunnich* p. 5.
*Br. Zool.* 67. *Tab.* A. 5.

57. MOOR BUZZARD.

THIS ſpecies frequents moors, marſhy places, and heaths; it never ſoars like other hawks; but commonly ſits on the ground, or on ſmall buſhes: it makes its neſt in the midſt of a tuft of graſs or ruſhes: we have found three young ones in it, but never happened to meet with the eggs: it is a very fierce and voracious bird, and is a great deſtroyer of rabbets, young wild ducks *, and other water fowl. It alſo preys, like the oſprey, upon fiſh.

Its uſual weight is twenty ounces: the length twenty-one inches: the breadth four feet three inches: the bill is black; cere yellow; irides of the ſame color: the whole bird, head excepted, is of a chocolate brown, tinged with ruſt color: on the head is a large

DESCRIP.

* In ſome places it is called the *duck hawk*.

yellowiſh ſpot; we have ſeen ſome birds of this kind with their head and chin entirely white; and others again have a whitiſh ſpot on the coverts of their wings; but theſe are only to be deemed varieties. The uniform color of its plumage, and the great length and ſlenderneſs of its legs, diſtinguiſhes it from all other hawks.

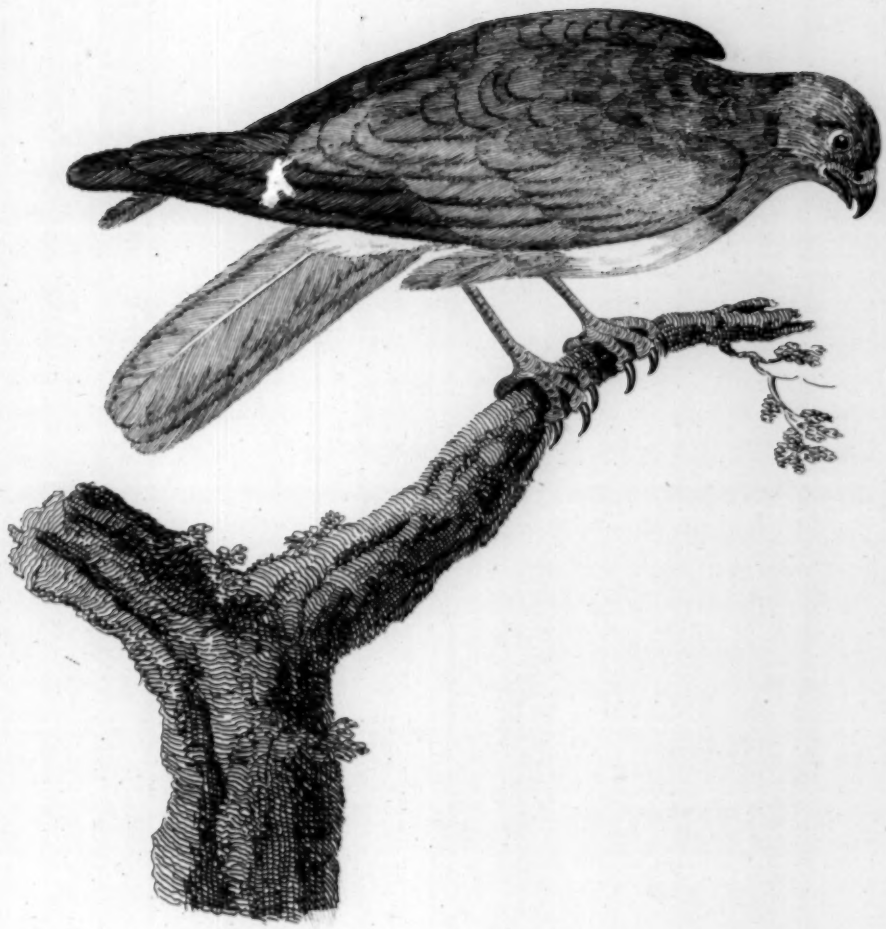
58. HEN-HARRIER.

Lanarius albus. *Aldr. av.* i. 197.
Rubetarius *Turneri.*
*Wil. orn.* 70.
*Raii ſyn. av.* 17.
Blue Hawk. *Edw.* 225. *the male.*
Falco Cyaneus. *Lin. ſyſt.* 126.
Le Lanier cendrè. *Briſſon av.* i. 365. *the male. Hiſt. d'Oys.* 1. 212.
*Br. Zool.* 68. *Tab.* A. 6. *Pl. Enl.* 459.
Grau-weiſſe Geyer. *Friſch.* I. 79, 80. *Brunnich* 14.

DESCRIP. THE HEN-HARRIER weighs about twelve ounces: the length is ſeventeen inches; the breadth three feet three inches: the bill is black: cere, irides, and edges of the eye-lids yellow: the head, neck, back, and coverts of the wings, are of a bluiſh grey: the back of the head white, ſpotted with a pale brown: the breaſt, belly, and thighs, are white: the former marked with a few ſmall duſky ſtreaks: the ſcapular feathers are of a deep grey, inclining to duſky: the two middle feathers of the tail are entirely grey; the others only on their exterior webs; the interior being white, marked with duſky bars: the legs yellow, long and ſlender.

Theſe birds are extremely deſtructive to young poultry, and to the feathered game: they fly near the ground, ſkimming the ſurface in ſearch of prey. They breed on the ground, and never are obſerved to ſettle on trees.

# HENHARRIER.



Subbuteo. *Geſner. av.* 48.
Ringtail. Pygargus accipiter. *Raii ſyn. av.* 17. *Wil. orn.* 70.
Le faucon a collier. *Briſſon av.* 1. 345. *Pl. Enl.* 443, and 480.
Une autre oyſeau St. *Martin. Belon av.* 104.
Rubetarius *Turneri.* La ſoubuſe. *Hiſt. d'Oys.* I. 215.
*Brunnich* No. 14. *Br. Zool.* 68. *Tab.* 4. 7.

59. RINGTAIL.

THE RINGTAIL weighs ſixteen ounces: is twenty inches long; and three feet nine inches broad: the *cere* and *irides* yellow: on the hind part of the head, round the ears to the chin, is a wreath of ſhort ſtiff feathers of a duſky hue, tipt with a reddiſh white: on the top of the head, and the cheeks, the feathers are duſky, bordered with ruſt color; under each eye is a white ſpot: the back is duſky, the rump white, with oblong yellowiſh ſpots on each ſhaft: the tail is long; the two middle feathers marked with four duſky, and four broad cinereous bars; the others with three black, and three tawny bars; but the tips of all, white: the breaſt and belly are of a yellowiſh brown, with a caſt of red, and marked with oblong duſky ſpots, but they are ſubject to vary, for we have met with one ſpecimen that had theſe parts entirely plain. The legs in color and ſhape reſemble thoſe of the preceding. DESCRIP.

This has generally been ſuppoſed to be the female of the former: but from ſome late obſervations by the infallible rule of diſſection, males have been found of this ſpecies. *Willughby* ſays, that the eggs are white, much beſmeared with red. Theſe birds fly higher than the *hen-harrier*; and I have ſeen them perch on trees.

La

60. Kestrel

La Creſſerelle. *Belon av.* 125.
*Geſner av.* 54.
Kiſtrel, Kaſtrel, or Steingal, *Turneri. Aldr. av.* 188.
The Keſtril, Stannel, Stonegall, Windhover. *Wil. orn.* 84. *Raii ſyn. av.* 16.
La Creſſerelle. *Briſſon av.* I. 393. *Hiſt. d'Oys.* 1. 280.
Windwachl, Rittlweyer, Wannenweher. *Kram,* 331.
Roethel-Geyer. *Friſch.* I. 84. *fœm.*
Mauſe-Falck. *Friſch.* I. 88.
Falco tinnunculus. *Lin. ſyſt.* 127.
Kyrko-Falk. *Faun. Suec. ſp.* 61.
Kirke-Falk. *Brunnich* 4. 5.
Gheppio, Acertello, Gavinello. *Zinan.* 88.
*Br. Zool.* 68. plate A. *Pl. Enl.* 401. 471.
Poſtoka, Splintza, Skoltſch. *Scopoli.* No. 5.

Descrip. THE male of this beautiful ſpecies weighs only ſix ounces and a half: its length fourteen inches: the breadth two feet three inches: cere and legs yellow: *irides* dark. Its colors at once diſtinguiſh it from all other hawks: the crown of the head, and the greater part of the tail, are of a fine light grey, the lower end of the latter is marked with a broad black bar: the inner webs of the three feathers next the two middle barred with black: the tips white: the back and coverts of the wings are of a brick red, elegantly ſpotted with black: the interior ſides of the quil feathers are duſky, deeply indented with white. The whole under ſide of the bird, of a pale ruſt color, ſpotted with black; the thighs and vent only, plain.

Female. The female weighs eleven ounces: the color of the back and wings are far leſs bright than thoſe of the male: it differs too in the colors of the head and tail; the former being of a pale reddiſh brown, ſtreaked with black; the latter of the ſame color, marked with numerous tranſverſe black bars: the breaſt is of a dirty yellowiſh

lowiſh white; and the middle of each feather has an oblong duſky ſtreak, pointing downwards.

The keſtrel breeds in the hollows of trees, in the holes of high rocks, towers and ruined buildings: it lays four eggs, of the ſame color with thoſe of the preceding ſpecies: its food is field mice, ſmall birds and inſects; which it will diſcover at a great diſtance. This is the hawk that we ſo frequently ſee in the air fixed in one place, and as it were fanning it with its wings; at which time it is watching for its prey. It flings up the indigeſted fur and feathers in form of a round ball. When falconry was in uſe in *Great Britain*, this kind was trained for catching ſmall birds and young partridges.

61. HOBBY.

Le Hobreau. *Belon av.* 118.
*Geſner av.* 75. *fæm.*
Hobbia. *Turneri.*
Æſalon. *Aldr. av.* I. 187.
The Hobby. *Wil. orn.* 83.
Le Hobreau, Dendro-falco. *Briſſon av.* I. 375. *Hiſt. d'Oys.* I. 277.
*Raii ſyn. av.* 15.
Falco ſubbuteo. *Lin. ſyſt.* 127.
*Faun. Suec. ſp.* 59.
Barletta. *Lorenzi av.* 45.
Stein-Falck. *Friſch.* I. 86.
Laerke-Falk. *Brunnich* 10. 11.
*Br. Zool.* 69. plate A. 9. *Pl. Enl.* 431.

THIS bird was alſo uſed in the humbler kind of falconry; particularly in what was called daring of larks: the hawk was caſt off; the larks aware of their moſt inveterate enemy, are fixed to the ground through fear; which makes them a ready prey to the fowler, by drawing a net over them. The hobby is a bird of paſſage; but breeds in *England*, and migrates in *October*.

The male weighs ſeven ounces: the length is one foot; the breadth

breadth two feet three inches: cere and orbits yellow: irides hazel: upper mandible furniſhed with a proceſs: above each eye a white line: the crown of the head and back are of a deep bluiſh black: the hind part of the head is marked with two pale yellow ſpots; each cheek with a large black one pointing downwards: the coverts of the wings are of the ſame color with the back, but ſlightly edged with ruſt color: the interior webs of the ſecondary and quil feathers, are varied with oval tranſverſe reddiſh ſpots: the breaſt white, marked with oblong ſpots of black: thighs and vent feathers, pale orange: the two middle feathers of the tail are entirely of a deep dove color: the others are barred on their interior ſides with ruſt color, and tipt with a dirty white. The ſpots on the

FEMALE. breaſt of the female are of a higher color than thoſe of the male: it is greatly ſuperior in ſize, its legs have a tinge of green, in other reſpects it reſembles the former.

62. SPARROW HAWK.

L'Eſpervier. *Belon av.* 121.
*Geſner av.* 51.
Sparhauc *Turneri.*
Accipiter fringillarius, ſparviero. *Aldr. av.* i. 183.
*Wil. orn.* 86.
L'Epervier, accipiter. *Briſſon av.* I. 310. *Hiſt. d'oys.* 1. 225.
*Raii ſyn. av.* 18.
Sperber *Friſch.* I. 90. 91. *Kram.* 332.
Falco niſus. *Lin. ſyſt.* 130.
Sparfhoek. *Faun. Suec. ſp.* 69.
Spurre-hoeg. *Brunnich p.* 5. *Scopoli.* No. 6.
*Br. Zool.* 69. plate A. 10. A. 11. *Pl. Enl.* 466, 467. 412.

THE difference between the ſize of the male and female ſparrow hawks, is more diſproportionate than in moſt other birds of prey; the former ſometimes ſcarce weighing five ounces,

DESCRIP. the latter nine ounces. The length of the male is about twelve inches,

es, the breadth twenty-three: the female is fifteen inches long; in breadth twenty-ſix.

Theſe birds, as well as the hawk kind in general, vary greatly in their colors; in ſome, the back, head, coverts of the wings and tail, are of a deep bluiſh grey; in others of a deep brown, edged with a ruſty red: the quil feathers are dusky, barred with black on their exterior webs, and ſpotted with white on the lower part of their inner webs: the tail is of a deep aſh color marked with fine broad black bars, the tip white: the breaſt and belly are of a whitiſh yellow, adorned with tranſverſe waved bars; in ſome of a deep brown color, in others orange: the cere, irides, and legs yellow. The colors of the female differ from thoſe of the male: the head is of a deep brown; the back, and coverts of the wings, are duſky mixed with dove color; the coverts of the tail of a brighter dove color; the waved lines that croſs the breaſt, are more numerous than thoſe on that of the male; and the breaſt itſelf of a purer white.

This is the moſt pernicious hawk we have; and makes great havoke among pigeons, as well as partridges. It builds in hollow trees, in old neſts of crows, large ruins, and high rocks: lays four white eggs, encircled near the blunter end with red ſpecks. Mr. *Willughby* places this among the ſhort-winged hawks; or ſuch whoſe wings, when cloſed, fall ſhort of the end of the tail. Manners.

63. MERLIN.*

L'Eſmerillon. *Belon av.* 118.
Æſalon. *Geſner av.* 44.
Merlina. *Turneri.*
Smerlus, Smerillus. *Aldr. av.* I. 187. *Wil. orn.* 85.
*Raii ſyn. av.* 15.
L'Emerillon. *Briſſon av.* I. 382.
Smerlio, o Smeriglio. *Lorenzi av. tab.* 18. 19.
*Br. Zool.* 70. plate A. 12. *Pl. Enl.* 468.
Hiſt. D'Oys. 1. 288.

DESCRIP. THE Merlin weighs near five ounces and a half: its length is twelve inches, its breath twenty five. The bill is of a bluiſh lead color: the cere of a lemon color: the irides very dark, almoſt black: the head is ferruginous, and each feather is marked with a bluiſh black ſtreak along the ſhaft: the back and wings are of a a deep bluiſh aſh color, adorned with ferruginous ſtreaks and ſpots, and edged with the ſame: the quil feathers are almoſt black, marked with reddiſh oval ſpots: the under coverts of the wings brown, beautifully marked with round white ſpots: the tail is five inches long, croſſed with alternate bars of duſky and reddiſh clay color; on ſome of the feathers of the ſame bird are thirteen, on ſome fifteen but in one bird I examined, were no more than eight: the breaſt and belly are of a yellowiſh white, marked with oblong brown ſpots pointing downwards: the legs yellow: the wings when

MANNERS. cloſed reach within an inch and a half of the end of the tail. This and the preceding kind were often trained for hawking: and this ſpecies, ſmall as it is, was inferior to none in point of ſpirit: it was uſed for taking partridges, which it would kill by a ſingle ſtroke on the neck. The Merlin flies low, and is often ſeen along roads'

* Merularius; quia merulas infectatur. *Skinner.*

ſides,

ſides, ſkimming from one ſide of the hedges to the other, in ſearch of prey.

It does not breed in *England*, but migrates here in *October*, about the time that the *Hobby* diſappears; for the Lark-catchers obſerve that in *September* they take no *Merlins* but abundance of *Hobbies*: but in the following month, *Merlins* only.

It was known to our *Britiſh* anceſtors by the name of *Llamyſden*; was uſed in hawking; and its neſt was valued at twenty-four pence. They made uſe of four other ſpecies, but have left us only their names; the *Hebog* or *Hawk*, whoſe neſt was eſtimated at a pound; the *Gwalch*'s or *Falcon*'s at one hundred and twenty pence; the *Hwyedig*'s or *long winged*, at twenty-four pence; and a ſpecies called *Cammin* or *crooked bill*, at four pence. The *Penhebogyd* or *chief falconer*, held the fourth place at the court of the *Welch* prince: but notwithſtanding the hoſpitality of the times, this officer was allowed only three draughts out of his horn, leaſt he ſhould be fuddled and neglect his birds *.

* *Leges Wallicæ*, 253. 25.

II. OWL. Large round HEAD, ſtrong hooked BILL, no CERE. Feathers round the face diſpoſed in a circular form. Outmoſt TOE capable of being turned back, and doing the office of a hind toe.

64. EAGLE. Bubo maximus nigri et fuſci coloris. *Sib. Scot.* 14.
Great Owl, or Eagle Owl. *Wil. orn.* 99. *Raii ſyn. av.*
Strix Bubo. *Lin. ſyſt.* 131.
Uff. *Faun. Suec.* No. 69.
Berg Uggle, Katugl hane. *Strom. Sondm.* 222.
Buhu. *Kram. Auſtr.* 323.
Sova. *Scopoli.* No. 7.
Le grand duc. *Briſſon.* I. 477. *De Buffon*, I. 332.
Eagle Owl. *Br. Zool.* IV. *Tab.* VI. *Pl. Enl.* 385. 435.

THE eagle owl has been ſhot in *Scotland* and in *Yorkſhire*. It inhabits inacceſſible rocks and deſert places; and preys on hares and feathered game. Its appearance in cities was deemed an unlucky omen; *Rome* itſelf once underwent a luſtration, becauſe one of them ſtrayed into the *capitol*. The antients had them in the utmoſt abhorrence, and thought them, like the ſcreech owls, the meſſengers of death. *Pliny* ſtyles it *Bubo funebris* & *noctis monſtrum*.

*Solaque culminibus* ferali *carmine* Bubo
*Sæpe queri et longas in fletum ducere voces.*

VIRGIL.

Perch'd on the roof the bird of night complains,
In lengthen'd ſhrieks, and dire funereal ſtrains.

In

EAGLE OWL.

# LONG-EARED OWL.

In ſize it is almoſt equal to an eagle. *Irides* bright yellow: head and whole body finely varied with lines, ſpots and ſpecks of black, brown, cinereous, and ferruginous. Wings long: tail ſhort, marked with duſky bars. Legs thick, covered to the very end of the toes with a cloſe and full down of a teſtaceous color. Claws great, much hooked and duſky.

## EARED OWLS.

65. LONG EARED.

L'Hibou cornu. *Belon av.* 136.
*Geſner av.* 635.
Aſio, ſeu Otus. *Aldr. av.* I. 265.
The Horn Owl. *Wil. orn.* 100.
*Raii ſyn. av.* 25.
Noctua aurita. *Sib. Scot.* 14.
Strix otus. *Lin. ſyſt.* 132.
Le moyen Duc ou le Hibou. *Briſſon av.* I. 486. *Hiſt. d'Oys.* I. 342.
Horn-uggla. *Faun. Suec. ſp.* 71.
*Haſſelquiſt itin.* 233.
Horn Ugle. *Brunnich* 16.
Horn-eule. *Kram.* 323.
*Br. Zool.* Plate 4. f. 1. *Pl. Enl.* 29. 473.
Mala Sova. *Scopoli* No. 9.
Rothe Kautzlein. *Friſch* I. 99.

THIS ſpecies is found, though not frequently, in the north of *England*, in *Cheſhire* and in *Wales*. The weight of the female, according to Mr. *Willughby* (for we never had opportunity of weighing it) is ten ounces: the length fourteen inches and a half: the breadth three feet four inches: the irides are of a bright yellow: the bill black: the circle of feathers ſurrounding the eyes is white tipt with reddiſh and duſky ſpots, and the part next the bill black: the breaſt and belly are of a dull yellow, marked with ſlender brown ſtrokes pointing downwards: the thighs and vent feathers of the ſame color, but unſpotted. The back and coverts

DESCRIP.

of

of the wings are varied with deep brown and yellow: the quil feathers of the ſame color, but near the ends of the outmoſt is a broad bar of red: the tail is marked with duſky and reddiſh bars, but beneath appears aſh colored: the horns or ears are about an inch long, and conſiſt of ſix feathers variegated with yellow and black: the feet are feathered down to the claws.

66. SHORT EARED. *Br. Zool.* 71. *Tab.* B. 3. and B. 4. Fig. 2.

THE horns of this ſpecies are very ſmall, and each conſiſts of only a ſingle feather; theſe it can raiſe or depreſs at pleaſure; and in a dead bird they are with difficulty diſcovered. This kind is ſcarcer than the former; both are ſolitary birds, avoiding inhabited places. Theſe ſpecies may be called long winged owls; the wings when cloſed reaching beyond the end of the tail; whereas in the common kinds, they fall ſhort of it.

This is a bird of paſſage, and has been obſerved to viſit *Lincolnſhire* the beginning of *October*, and to retire early in the ſpring; ſo probably, as it performs its migrations with the woodcock, its ſummer retreat is *Norway*. During day it lies hid in long old graſs; when diſturbed, it ſeldom flies far, but will light and ſit looking at one, at which time the horns may be ſeen very diſtinctly. It has not been obſerved to perch on trees, like other owls: it will alſo fly in ſearch of prey in cloudy hazy weather. Farmers are fond of ſeeing theſe birds in their fields, as they clear them from mice. It is found frequently on the hill of *Hoy* in the *Orknies*, where

## SHORT EARED OWL.

where it flies about and preys by day like a hawk. I have alſo received this ſpecies from *Lancaſhire*, which is a hilly and wooded country: and my friends have alſo ſent it from *New England* and *Newfoundland*.

The length of the ſhort eared owl is fourteen inches: extent three feet: the head is ſmall and hawk-like: the bill is duſky: weight fourteen ounces: the circle of feathers that immediately ſurrounds the eyes is black: the larger circle white, terminated with tawny and black: the feathers on the head, back, and coverts of the wings are brown edged with pale dull yellow: the breaſt and belly are of the ſame color, marked with a few long narrow ſtreaks of brown pointing downwards: the thighs, legs and toes, are covered with plain yellow feathers; the quill feathers are duſky, barred with red: the tail is of a very deep brown, adorned on each ſide the ſhaft of the four middle feathers with a yellow circle which contains a brown ſpot: the tip of the tail is white. DESCRIP.

The other *European* horn owl, the little horn owl, *Scops* or *Petit Duc* of *M. de Buffon*, I. 353, is unknown in *Great Britain*.

## OWLS WITH SMOOTH HEADS.

67. WHITE.

*Belon av.* 143*.
Aluco minor. *Aldr. av.* I. 272.
Common barn, white, or church Owl, Howlet, madge Howlet, Gillihowter. *Wil. orn.* 104.
*Raii syn. av.* 25.
Le petit Chat-huant. *Briſſon av.* I. 503.
Allocco. *Zinan.* 99.
Strix flammea. *Lin. ſyſt.* 133. *Faun. Suec.* 73.
*Br. Zool.* 71. plate B. *Pl. Enl.* 474.
L' Effraie. *Hiſt. d'Oys.* I. 366.
Perl-Eule. *Friſch.* I. 97.

THIS ſpecies is almoſt domeſtic: inhabiting for the greateſt part of the year, barns, haylofts, and other outhouſes; and is as uſeful in clearing thoſe places from mice, as the congenial cat: towards twilight it quits its perch, and takes a regular circuit round the fields, ſkimming along the ground in queſt of field mice, and then returns to its uſual reſidence: in the breeding ſeaſon it takes to the eaves of churches, holes in lofty buildings, or hollows of trees. During the time the young are in the neſt, the male and female alternately ſally out in queſt of food, make their circuit, beat the fields with the regularity of a ſpaniel, and drop inſtantly on their prey in the graſs. They very ſeldom ſtay out above five minutes; return with their prey in their claws; but as it is neceſſary to ſhift it into their bill, they always alight for that purpoſe on the roof, before they attempt to enter their neſt.

* This refers only to the figure, for his deſcription means the *Goatſucker*.

This

This ſpecies I believe does not hoot; but ſnores and hiſſes in a violent manner; and while it flies along, will often ſcream moſt tremendouſly. Its only food is mice: as the young of theſe birds keep their neſt for a great length of time, and are fed even long after they can fly, many hundreds of mice will ſcarcely ſuffice to ſupply them with food.

Owls caſt up the bones, fur or feathers of their prey in form of ſmall pellets, after they have devoured it, in the ſame manner as hawks do. A gentleman, on grubbing up an old pollard aſh that had been the habitation of owls for many generations, found at the bottom many buſhels of this rejected ſtuff. Some owls will, when they are ſatisfied, like dogs, hide the remainder of their meat.

The elegant plumage of this bird makes amends for the uncouthneſs of its form: a circle of ſoft white feathers ſurround the eyes. The upper part of the body, the coverts and ſecondary feathers of the wings are of a fine pale yellow: on each ſide the ſhafts are two grey and two white ſpots placed alternate: the exterior ſides of the quil feathers are yellow; the interior white, marked on each ſide with four black ſpots: the lower ſide of the body is wholly white: the interior ſides of the feathers of the tail are white; the exterior marked with ſome obſcure duſky bars: the legs are feathered to the feet: the feet are covered with ſhort hairs: the edge of the middle claw is ſerrated. The uſual weight of this ſpecies is eleven ounces: its length fourteen inches: its breadth three feet. SIZE.

68. TAWNY OWL.

Ulula. *Geſner av.* 773.
Strix. *Aldr. av.* I. 285.
Common brown or ivy Owl. *Wil. orn.* 102.
*Raii ſyn. av.* 25.
Le Chat huant. *Briſſon av.* I. 500. *Hiſt. d'Oys.* I. 362.
Strige. *Zinan*, 100. *Scopoli*, No. 12.
Strix ſtridula. *Lin. ſyſt.* 133.
Skrik uggla. *Faun. Suec.* 77.
Strix Orientalis. *Haſſelquiſt itin.* 233.
Nacht Eule, Gemeine. *Kram.* 324.
Braune-Eule, or Stock-Eule? *Friſch*, I. 96.
Nat Ugle. *Brunnich*, 18.
*Br. Zool.* 72. plate B. 3. *Pl. Enl.* 437.

THIS is the *Strix* of *Aldrovandus*, what we call the *Screech Owl*; to which the folly of ſuperſtition had given the power of preſaging death by its cries. The antients believed that it ſucked the blood of young children; a fact not incredible, for *Haſſelquiſt** deſcribes a ſpecies found in *Syria*, which frequently in the evening flies in at the windows, and deſtroys the helpleſs infant.

Nocte volant pueroſque petunt nutricis egentes,
Et vitiant cuneis corpora rapta ſuis.
Carpere dicuntur lactentia viſcera roſtris,
Et plenum poto ſanguine guttur habent.
Eſt illis ſtrigibus nomen, ſed nominis hujus
Cauſa quod horrenda ſtridere nocte ſolent.

*Ovid. Faſt.* VI. 135.

DESCRIP. The female of this ſpecies weighs nineteen ounces: the length is fourteen inches: the breadth two feet eight inches: the irides

* *Itin.* 255.

are

# BROWN OWL.

are duſky: the ears in this, as in all owls, very large; and their ſenſe of hearing very exquiſite. The color of this kind is ſufficient to diſtinguiſh it from every other: that of the back, head, coverts of the wings, and on the ſcapular feathers, being a fine tawny red, elegantly ſpotted and powdered with black or duſky ſpots of various ſizes: on the coverts of the wings, and on the ſcapulars, are ſeveral large white ſpots: the coverts of the tail are tawny, and quite free from any marks: the tail is variouſly blotched, barred and ſpotted with pale red and black; in the two middle feathers the red predominates: the breaſt and belly are yellowiſh, mixed with white, and marked with narrow black ſtrokes pointing downwards: the legs are covered with feathers down to the toes.

This is a hardier ſpecies than the former; and the young will feed on any dead thing, whereas thoſe of the white owl muſt have a conſtant ſupply of freſh meat.

The grey Owl. *Wil. orn.* 103.
*Raii ſyn. av.* 26.
La Hulote. *Briſſon av.* I. 507.
Strix Ulula. *Lin. ſyſt.* 133.
*Faun. Suec.* 78.
Ugle. *Brunnich*, 19.
Graue Eule? *Friſch*, I. 94.
*Br. Zool.* 72. Plate B. 1.

69. BROWN.

AS the names this and the precedent ſpecies bear do by no means ſuit their colors, we have taken the liberty of changing them to others more congruous. Both theſe kinds agree entirely in their marks; and differ only in the colors: in this the head, wings and back are of a deep brown, ſpotted with black in the ſame manner as the former: the coverts of the wings and the ſcapulars are adorned with ſimilar white ſpots: the exterior edges

DESCRIP.

of the four firſt quil feathers in both are ſerrated: the breaſt in this is of a very pale aſh color mixed with tawny, and marked with oblong jagged ſpots: the feet too are feathered down to the very claws: the circle round the face is aſh-colored, ſpotted with brown.

Both theſe ſpecies inhabit woods, where they reſide the whole day; in the night they are very clamorous; and when they hoot, their throats are inflated to the ſize of an hen's egg. In the duſk they approach our dwellings; and will frequently enter pigeon houſes, and make great havoke in them. They deſtroy numbers of little leverets, as appears by the legs frequently found in their neſts. They alſo kill abundance of moles, and ſkin them with as much dexterity as a cook does a rabbet. Theſe breed in hollow trees, or ruined edifices; lay four eggs of an elliptic form, and of a whitiſh color.

70. LITTLE. La Cheveche. *Belon av.* 140.
Noctua. *Geſner av.* 620.
Little Owl. *Wil. orn.* 105.
*Raii ſyn. av.* 26.
*Edw.* 228.
Tſchiavitl. *Kram.* 324.
*Faun. Suec.* 79.
La petite Chouette, ou la Cheveche. *Briſſon av.* I. 514.
Strix paſſerina. *Lin. ſyſt.* 133.
La Civetta. *Olina*, 65. *Scopoli*, No. 17.
Krak-Ugle. *Brunnich*, 20.
Kleinſte Kæutzlein. *Friſch*, I. 100.
*Br. Zool.* 73. plate B. 5.

DESCRIP. THIS elegant ſpecies is very rare in *England*; it is ſometimes found in *Yorkſhire*, *Flintſhire*, and alſo near *London*: in ſize it ſcarcely exceeds a thruſh, though the fullneſs of its plumage makes it appear larger: the irides are of a light yellow: the bill of a paper color: the feathers that encircle the face are white, tipt

tipt with black: the head brown, ſpotted with white: the back, and coverts of the wings of a deep olive brown; the latter ſpotted with white: on the breaſt is a mixture of white and brown: the belly is white, marked with a few brown ſpots: the tail of the ſame color with the back: in each feather barred with white: in each adorned with circular white ſpots, placed oppoſite one another on both ſides the ſhaft: the legs and feet are covered with feathers down to the claws.

The *Italians* made uſe of this owl to decoy ſmall birds to the limed twig: the method of which is exhibited in *Olina*'s *uccelliera*, p. 65.

Mr. *Steuart*, the admirable author of the Antiquities of *Athens*, informed me that this ſpecies of owl was very common in *Attica*; that they were birds of paſſage, and appeared there the beginning of *April* in great numbers; that they bred there; and that they retired at the ſame time as the *Storks*, whoſe arrival they a little preceded.

## Order II. PIES.

III. SHRIKE. Strong bill, ſtrait at the baſe, and hooked at the end. Each ſide of the upper mandible marked with one notch. Outmoſt toe cloſely joined to the middlemoſt as far as the firſt joint.

71. Great. Le grande Pie grieſche. *Belon av.* 126.
Lanius cinereus. *Geſner av.* 579.
Skrike, nyn murder *Turneri.*
Lanius cinereus, Collurio major. *Aldr. av.* I. 199.
Caſtrica, Ragaſtola. *Olina*, 41.
Greater Butcher Bird, or Mattageſs; in the *North of England*, Wierangle. *Wil. orn.* 87.
*Raii ſyn. av.* 18.
Speralſter, Grigelalſter, Neuntodter. *Kram.* 364.
Butcher Bird, Murdering Bird or Skreek. *Mer. Pinax*, 170.
*Cat. Carol.* app. 36.
Night Jar. *Mort. Northampt.* 424.
La Pie-grieſche griſe. *Briſſon av.* II. 141. *Hiſt d'Oys.* I. 296. *Pl. Enl.* 32 f. 1.
Lanius excubitor. *Lin. ſyſt.* 135.
Warfogel. *Faun. Suec.* 80.
*Daniſh* Torn-Skade. *Norvegis* Klavert. *Br.* 21. 22.
*Br. Zool.* 73. plate C. *Pl. Enl.* 445.
Velch Skrakoper. *Scopoli*, No. 18.
Berg-Aelſter (Mountain Magpie) or groſſer Neuntocdter. *Friſch*, I. 59.

Size. THIS bird weighs three ounces: its length is ten inches: its breadth fourteen: its bill is black, one inch long, and hooked at the end; the upper mandible furniſhed with a ſharp proceſs: the noſtrils are oval, covered with black briſtles pointing downwards: the muſcles that move the bill are very thick and ſtrong; which

# GREAT FEMALE SHRIKE.

which makes the head very large. This apparatus is quite requiſite in a ſpecies whoſe method of killing its prey is ſo ſingular, and whoſe manner of devouring it is not leſs extraordinary: ſmall birds it will ſeize by the throat, and ſtrangle *; which probably is the reaſon the *Germans* call this bird *Wurchangel* †, or the ſuffocating angel. It feeds on ſmall birds, young neſtlings, beetles and caterpillars. When it has killed the prey, it fixes them on ſome thorn, and when thus ſpitted pulls them to pieces with its bill: on this account the *Germans* call it *Thorntráer* and *Thornfreker*. We have ſeen them, when confined in a cage, treat their food in much the ſame manner, ſticking it againſt the wires before they would devour it. Mr. *Edwards* very juſtly imagines that as nature has not given theſe birds ſtrength ſufficient to tear their prey to pieces with their feet, as the hawks do, they are obliged to have recourſe to this artifice. Manners.

It makes its neſt with heath and moſs, lining it with wool and goſſamer; and lays ſix eggs, of a dull olive green, ſpotted at the thickeſt end with black.

The crown of the head, the back, and the coverts that lie immediately on the joints of the wings are aſh-colored; the reſt of the coverts black: the quil feathers are black, marked in their middle with a broad white bar; and except the four firſt feathers, and the ſame number of thoſe next the body, are tipt with white: the tail conſiſts of twelve feathers of unequal lengths, the middle being the longeſt; the two middlemoſt are black, the next on each ſide tipt with white, and in the reſt the white gradually increaſes to the outmoſt, where that color has either entire poſſeſſion, or there remains Deſcrip. Tail.

* *Edw. Gl.* III. 233. † *Wil. orn.* 87.

only

Cheeks. only a ſpot of black: the cheeks are white, but croſſed from the bill to the hind part of the head with a broad black ſtroke: the throat, breaſt and belly are of a dirty white: the legs are black. The female is of the ſame color with the male, the breaſt and belly excepted, which are marked tranſverſely with numerous ſemicircular brown lines.

72. Red-backed.

La petite Pie grieſche griſe. *Belon av.* 128.
Lanius tertius. *Aldr. av.* I. 199.
Leſſer Butcher Bird, called in *Yorkſhire* Fluſher. *Wil. orn.* 88. *ſp.* 2. the *male*. 89. *ſp.* 3. the *female*.
*Raii ſyn. av.* 18.
*Daniſh* Tornſkade. *Norv.* Hantvark. *Br.* 23.
*Mort. Northampt.* 424.
L'Ecorcheur. *Briſſon av.* II. 151.
*Pl. Enl.* 31. f. 2. *Hiſt. d'Oys.* I. 304.
Lanius collurio. *Lin. ſyſt.* 136.
*Faun. Suec.* 81. Tab. II. f. 81.
Dorngreul, Dornheher *Kram.* 363.
Bufferola, Ferlotta roſſa. *Zinan,* 91.
*Br. Zool.* 74. plate C. 1.
Mali Skrakoper. *Scopoli,* No. 19.

Descrip. THE male weighs two ounces; the female two ounces two drams. The length of the former is ſeven inches and a half; the breadth eleven inches. The irides are hazel; the bill reſembles that of the preceding ſpecies: the head and lower part of the back are of a fine light grey: acroſs the eyes from the bill runs a broad black ſtroke: the upper part of the back, and coverts of the wings, are of a bright ferruginous color; the breaſt, belly and ſides are of an elegant bloſſom color; the two middle feathers of the tail are longeſt, and entirely black; the lower part of the others white, and the exterior webs of the outmoſt feather on each ſide wholly ſo.

In

In the female the ſtroke acroſs the eyes is of a reddiſh brown: the head of a dull ruſt color mixed with grey: the breaſt, belly and ſides of a dirty white, marked with ſemicircular duſky lines: the tail is of a deep brown; the outward feather on each ſide excepted, whoſe exterior webs are white.

Theſe birds build their neſts in low buſhes, and lay ſix eggs of a white color, but encircled at the bigger end with a ring of browniſh red.

Lanius minor primus. *Aldr. av.* I. 200.
Another ſort of Butcher Bird. *Wil. orn.* 89. *ſp.* 4.
The Wood-chat. *Raii ſyn. av.* 19. *ſp.* 6.
*Br. Zool.* 74. plate C. 2.
Dorngreul mit rother platten. *Kram.* 363.
La Pie grieſche rouſſe. *Briſſon av.* II. 147. *Hiſt. d'Oys.* I. 301.
*Pl. Enl.* 9. f. 2.
Buferola, Ferlotta bianca. *Zinan.* 89.
Kleiner Neuntoedter. *Friſch*, I. 61.

73. WOOD-CHAT.

DESCRIP. IN ſize it ſeems equal to the preceding: the bill is horn colored: the feathers that ſurround the baſe are whitiſh; above is a black line drawn croſs the eyes, and then downwards each ſide the neck: the head and hind part of the neck are of a bright bay: the upper part of the back duſky: the coverts of the tail grey: the ſcapulars white: the coverts of the wings duſky: the quil feathers black, marked towards the bottom with a white ſpot: the throat, breaſt and belly of a yellowiſh white. The two middle feathers appear by the drawing to be entirely black: the exterior edges and tips of the reſt white: the legs black.

Female. The female differs: the upper part of head, neck and body are reddiſh, ſtriated tranſverſely with brown: the lower parts of the body are of a dirty white, rayed with brown: the tail is of a reddiſh brown, marked near the end with duſky, and tipt with red.

Strait

Strait ſtrong BILL: NOSTRILS covered with briſtles reflected down. Outmoſt TOE cloſely connected to the middle toe as far as the firſt joint. IV. CROW.

74. RAVEN.

Le Corbeau. *Belon av.* 279.
Corvus. *Geſner av.* 334.
Corvo, Corbo. *Aldr. av.* I. 343.
*Wil. orn.* 121.
*Raii ſyn. av.* 39.
Le Corbeau. *Briſſon av.* II. 8.
Velch oru. *Scopoli*, No. 35.
Corvus corax. *Lin. ſyſt.* 155.
Korp. *Faun. Suec.* 85.
*Daniſh* Raun. *Norv.* Korp. *Br.* 27.
Rab. *Kram.* 333. *Friſch*, I. 63.
*Br. Zool.* 75. *Hiſt. d'Oys.* III. 13.

DESCRIP. THIS ſpecies weighs three pounds: its length is two feet two inches: its breadth four feet: the bill is ſtrong and thick; and the upper mandible convex. The color of the whole bird is black, finely gloſſed with a rich blue; the belly excepted, which is duſky.

Ravens build in trees, and lay five or ſix eggs of a pale green color marked with ſmall browniſh ſpots. They frequent in numbers the neighborhood of great towns; and are held in the ſame ſort of veneration as the vultures are in *Egypt* *, and for the ſame reaſon; for devouring the carcaſes and filth, that would otherwiſe prove a nuſance. A vulgar reſpect is alſo paid to the raven, as

* *Haſſelquiſt itin.* 23.

being the bird appointed by Heaven to feed the prophet *Elijah*, when he fled from the rage of *Ahab* *. The raven is a very docil bird, may be taught to ſpeak, and fetch and carry. In clear weather they fly in pairs a great height, making a deep loud noiſe, different from the common croaking. Their ſcent is remarkably good; and their life prolonged to a great ſpace.

The quils of ravens ſell for twelve ſhillings the hundred, being of great uſe in tuning the lower notes of a harpſichord, when the wires are ſet at a conſiderable diſtance from the ſticks.

75. Carrion.

La Corneille. *Belon av.* 281.
Cornix (Krae). *Geſner av.* 320.
Cornice, Cornacchio. *Aldr. av.* I. 369.
*Wil. orn.* 122.
*Raii ſyn. av.* 39.
La Corbine. *Hiſt. d'Oys.* III. 45.
La Corneille. *Briſſon av.* 12.
Corvus corone. *Lin. ſyſt.* 155.
*Faun. Suec.* 86.
Krage. *Br.* 30.
*Br. Zool.* 75.
Oru. *Scopoli*, No. 36.

THE crow in the form of its body agrees with the raven; alſo in its food, which is carrion and other filth. It will alſo eat grain and inſects; and like the raven will pick out the eyes of young lambs when juſt dropped: for which reaſon it was formerly diſtinguiſhed from the rook, which feeds entirely on grain and inſects, by the name of the *gor* or *gorecrow*; thus *Ben Johnſon* in his *Fox*, *act* I. *ſcene* 2.

Vulture, kite,
Raven and *gor-crow*, all my birds of prey.

* 1. *Kings* 17.

*Virgil*

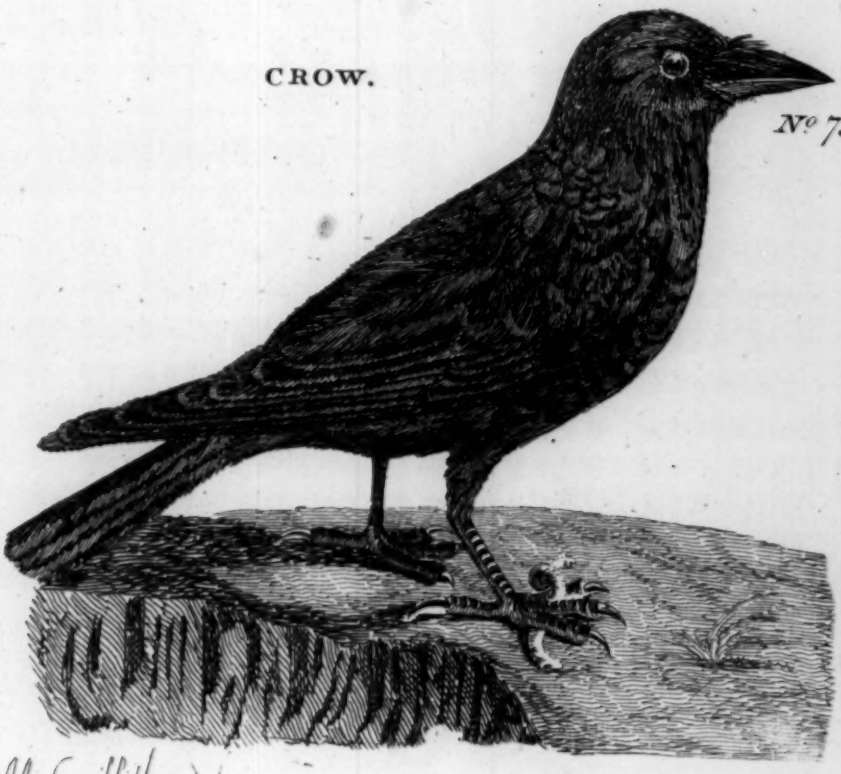
Pl. XXXIV

JACKDAW.

No 81

CROW.

No 75



M Griffiths del

*Virgil* ſays that its croaking foreboded rain:

*Tum* Cornix *plena pluviam vocat improba voce.*

It was alſo thought a bird of bad omen, eſpecially if it happened to be ſeen on the left hand:

*Sæpe ſiniſtra cava prædixit ab illice* Cornix.

*England* breeds more birds of this tribe than any other country in *Europe*. In the twenty-fourth of *Henry* VIII. they were grown ſo numerous, and thought ſo prejudicial to the farmer, as to be conſidered an evil worthy parlementary redreſs: an act was paſſed for their deſtruction, in which rooks and choughs were included. Every hamlet was to provide crow nets for ten years; and all the inhabitants were obliged at certain times to aſſemble during that ſpace, to conſult the propereſt method of extirpating them.

Though the crow abounds in our country, yet in *Sweden* it is ſo rare, that *Linnæus* mentions it only as a bird that he once knew killed there.

It lays the ſame number of eggs as the raven, and of the ſame color: immediately after deſerting their young, they go in pairs. Both theſe birds are often found white, or pied; an accident that befals black birds more frequently than any others: I have alſo ſeen one entirely of a pale brown color, not only in its plumage, but even in its bill and feet. The crow weighs about twenty ounces. Its length eighteen inches: its breadth two feet two inches.

76. ROOK.

La Graye, Grolle ou Freux. *Belon av.* 283.
Cornix frugivora (Roeck). *Geſner av.* 332.
*Aldr. av.* I. 378.
*Wil. orn.* 123.
*Raii ſyn. av.* 39.
Corvus frugilegus. *Lin. ſyſt.* 156.
Le Freux, ou la Frayonne. *Hiſt. d'Oys.* III. 55.
La Corneille Moiſſoneuſe. *Briſſon av.* II. 16.
Roka. *Faun. Suec.* 87.
Spermologus, ſeu frugilega. *Caii opuſc.* 100.
Schwartze krau, Schwartze krahe. *Kram.* 333. *Friſch*, I. 64.
*Br. Zool.* 76.

THE Rook is the *Corvus* of *Virgil*, no other ſpecies of this kind being gregarious.

E paſtu decedens agmine magno
*Corvorum* increpuit denſis exercitus alis.

A very natural deſcription of the evening return of theſe birds to their neſts.

This bird differs not greatly in its form from the carrion crow: the ſize of the rook is ſuperior; but the colors in each are the ſame, the plumage of both being gloſſed with a rich purple. But what diſtinguiſhes the rook from the crow is the bill; the noſtrils, chin, and ſides of that and the mouth being in old birds white and bared of feathers, by often thruſting the bill into the ground in ſearch of the *erucæ* of the Dor-beetle *; the rook then, inſtead of being proſcribed, ſhould be treated as the farmer's friend; as it clears his ground from caterpillars, that do incredible

* Scarabæus melolantha. *Lin. ſyſt.* 351. *Roſel*, II. *Tab.* 1. *Liſt. Goed.* 265.

damage

damage by eating the roots of the corn. Rooks are ſociable birds, living in vaſt flocks: crows go only in pairs. They begin to build their neſts in *March*; one bringing materials, while the other watches the neſt, leſt it ſhould be plundered by its brethren: they lay the ſame number of eggs as the crow, and of the ſame color, but leſs. After the breeding ſeaſon rooks forſake their neſt-trees, and for ſome time go and rooſt elſewhere, but return to them in *Auguſt*: in *October* they repair their neſts *.

La Corneille emantelée. *Belon. av.* 285.
Cornix varia, Marina, Hyberna, (Nabelfrae.) *Geſner av.* 332.
Cornix cinerea. *Aldr. av.* I. 379.
*Raii ſyn. av.* 39.
*Martin's Weſt. Iſles*, 376.
Hooded Crow. *Sib. Scot.* 15.
*Pl. Enl.* 76.
La Corneille mantelée. *Briſſon av.* II. 19. *Hiſt. d' Oys.* III. 61.
Mulacchia cinerizia, Monacchia. *Zinnan.* 70. 77. HOODED.
Corvus cornix. *Lin. ſyſt.* 156.
Kraka. *Faun. Suec. ſp.* 88.
Grave Kran, Kranveitl. *Kram.* 333.
Graue - Krœhe (grey - Cow), Nebel-Krœhe (miſt-Crow). *Friſch*, I. 65.
*Br. Zool.* 76. plate D. 1.
Urana. *Scopoli*, No. 37.

THE bill of this ſpecies agrees in ſhape with that of the rook, to which it bears great ſimilitude in its manners, flying in flocks, and feeding on inſects. In *England* it is a bird of paſſage; it viſits us in the beginning of winter, and leaves us with the woodcocks. They are found in the inland as well as maritime parts of our country; in the latter they feed on crabs and ſhelfiſh.

* *Calendar of Flora.*

It

It is very common in *Scotland:* in many parts of the *Highlands*, and in all the *Hebrides*, *Orknies*, and *Shetlands*, is the only ſpecies of genuine crow; the *Carrion* and the *Rook* being unknown there. It breeds and continues in thoſe parts, the whole year round. Perhaps thoſe that inhabit the northern parts of *Europe*, are they which migrate here. In the *Highlands* they build indifferently in all kinds of trees: lay ſix eggs: have a ſhriller note than the common crows, are much more miſchievous, pick out the eyes of lambs, and even of horſes when engaged in bogs: are therefore in many places proſcribed, and rewards given for killing them. For want of other food, they will eat cran-berries and other mountain berries.

*Belon*, *Geſner*, and *Aldrovand*, agree that this is a bird of paſſage in their reſpective countries: that it reſorts in the breeding ſeaſon to high mountains, and deſcends into the plains on the approach of winter. It breeds alſo in the ſouthern parts of *Germany*, on the banks of the *Danube**.

Descrip. The weight of this ſpecies is twenty-two ounces: the length twenty-two inches; the breadth twenty-three. The head, under ſide of the neck, and wings are black, gloſſed over with a fine blue: the breaſt, belly, back, and upper part of the neck, are of a pale aſh color: the irides hazel: the legs black, and weaker than thoſe of the Rook. The bottom of the toes are very broad and flat, to enable them to walk without ſinking on marſhy and muddy grounds, where they are converſant.

* *Kram.* 333.

La

La Pie. *Belon av.* 291.
Pica varia et caudata. *Geſner av.* 695. *Aldr. av.* I. 392.
The Magpie, or Pianet. *Wil. orn.* 127. *Raii ſyn. av.* 41.
La Pie. *Briſſon*, II. 35. *Hiſt. d'Oys*, III. 85.
Gazza, Putta. *Zinan.* 66.
Corvus Pica. *Lin. ſyſt.* 157.
Skata, Skiura, Skara. *Faun. Suec. ſp.* 92.
*Daniſh* Skade, Huus Skade. *Norv.* Skior, Tunfugl. *Brunnich*, 32.
Aelſter. *Friſch*, I. 58.
Alſter. *Kram.* 335.
*Br. Zool.* 77. plate D. 2.
Praka. *Scopoli*, No. 38.

78. MAGPIE.

THE great beauty of this very common bird was ſo little attended to, that the editors of the *Britiſh Zoology* thought fit to publiſh a print of it after a painting by the celebrated *Barlow*. The marks of this ſpecies are ſo well known, that it would be impertinent to detain the reader with the particulars.

We ſhall only obſerve the colors of this bird: its black, its white, its green, and purple, and the rich and gilded combination of gloſſes on the tail, are at leſt equal to thoſe that adorn the plumage of any other. It bears a great reſemblance to the butcher-bird in its bill, which has a ſharp proceſs near the end of the upper mandible; in the ſhortneſs of its wings, and the form of the tail, each feather ſhortening from the two middlemoſt: it agrees alſo in its food; which are worms, inſects, and ſmall birds. It will deſtroy young chickens; is a crafty, reſtleſs, noiſy bird: *Ovid* therefore with great juſtice ſtyles it,

---------- Nemorum convicia *Pica.*

Is eaſily tamed; may be taught to imitate the human voice: it builds its neſt with great art, covering it entirely with thorns, except one ſmall hole for admittance; and lays ſix or ſeven eggs, of

a pale green color ſpotted with brown. The magpie weighs near nine ounces: the length is eighteen inches; the breadth only twenty four.

79. JAY.

Le Jay. *Belon av.* 289.
Pica glandaria. *Geſner av.* 700.
*Aldr. av.* I. 393.
*Olina*, 35.
*Wil. orn.* 130.
*Raii ſyn. av.* 41.
Ghiandaia. *Zinan.* 67.
Corvus glandarius. *Lin. ſyſt.* 156.
Le Geay, Garrulus. *Briſſon av.* II. 47. *Hiſt. d'Oys.* III. 107.
Allonſkrika, Kornſkrika. *Faun. Suec. ſp.* 90.
Skov-ſkade. *Br.* 33.
Nuſſ-heher. *Kram.* 335.
Eichen-Heher (Oak-Jay), or Holtz-Schreyer (Wood-Cryer). *Friſch*, I. 55.
*Br. Zool.* 77. plate D.
Skoia, Schoga. *Scopoli*, No. 39.

DESCRIP. THIS is one of the moſt beautifull of the *Britiſh* birds. The weight is between ſix and ſeven ounces: the length thirteen inches; the breadth twenty and a half.

The bill is ſtrong, thick and black; about an inch and a quarter long. The tongue black, thin, and cloven at the tip: the irides white. The chin is white: at the angle of the mouth are two large black ſpots. The forehead is white, ſtreaked with black: the head is covered with very long feathers, which at pleaſure it can erect into the form of a creſt: the whole neck, back, breaſt and belly are of a faint purple daſhed with grey; the covert feathers of the wings are of the ſame color.

The firſt quil feather is black; the exterior webs of the nine next are aſh-colored, the interior webs duſky: the ſix next black; but the lower ſides of their exterior webs are white tinged with blue;

blue; the two next wholly black; the laſt of a fine bay color tipt with black.

The leſſer coverts are of a light bay: the greater covert feathers moſt beautifully barred with a lovely blue, black and white: the reſt black: the rump is white. The tail conſiſts of twelve black feathers. The feet are of a pale brown: the claws large and hooked. It lays five or ſix eggs, of a dull whitiſh olive, mottled very obſcurely with pale brown. The neſt is made entirely of the fine fibres of roots of trees; but has for a foundation ſome coarſe ſticks: it is generally placed on the top of the underwood, ſuch as hazels, thorns, or low birch. The young follow their parents till the ſpring: in the ſummer they are very injurious to gardens, being great devourers of peaſe and cherries; in the autumn and winter they feed on acorns, from whence the Latin name. Dr. *Kramer** obſerves, that they will kill ſmall birds. Jays are very docil, and may be taught to imitate the human voice: their native note is very loud and diſagreeable. When they are enticing their fledged young to follow them, they emit a noiſe like the mewing of a cat.

* *Kram. elench.* 335.

80. RED LEGGED.

Scurapola. *Belon. obſ.* 12.
La Chouette ou Chouca rouge. *Belon av.* 286.
Pyrrhocorax gracculus ſaxatilis (Stein-tahen, Stein-frae). *Geſner av.* 522, 527.
Spelvier, Taccola. *Aldr. av.* I. 386. *Wil. orn.* 126.
*Raii ſyn. av.* 40.
Le Crave. *Hiſt. d'Oyſ.* III. 1.
The Killegrew. *Charlton ex.* 75.
Cornwall Kae. *Sib. Scot.* 15.
*Borlaſe Cornw.* 249. *Tab.* 24.
*Camden*, Vol. I. 14.
Le Coracias. *Briſſon av.* II. 4. *Tab.* 1.
Corvus gracculus. *Lin. ſyſt.* 158.
Monedula pyrrhocorax. *Haſſelquiſt itin.* 238.
*Br. Zool.* 83. plate L *.
Gracula pyrrhocorax. *Scopoli*, No. 46.

THIS ſpecies is but thinly ſcattered over the northern world: no mention is made of it by any of the *Fauniſts*; nor do we find it in other parts of *Europe*, except *England*, and the *Alps**. In *Aſia*, the iſland of *Candia* produces it†. In *Africa*, *Ægypt*: which laſt place it viſits towards the end of the inundations of the *Nile*‡. Except *Ægypt* it affects mountanous and rocky ſituations; and builds its neſt in high cliffs, or ruined towers, and lays four or five eggs, white ſpotted with a dirty yellow. It feeds on inſects, and alſo on new ſown corn: they commonly fly high, make a ſhriller noiſe than the jackdaw, and may be taught to ſpeak. It is a very tender bird, and unable to bear very ſevere weather; is of an elegant, ſlender make; active, reſtleſs, and thieving; much taken with glitter, and ſo meddling as not to be truſted where things of conſequence lie. It is very apt to catch up bits of lighted ſticks; ſo that there are inſtances of houſes being ſet on fire by its

* *Plin. nat. hiſt. lib.* X. *c.* 48. *Briſſon*, II. 5.
† *Belon obſ.* 17.
‡ *Haſſelquiſt itin.* 240.

means;

## RED LEGGED CROW.

means; which is the reaſon that *Camden* calls it *incendiaria avis.* Several of the *Welſh* and *Corniſh* families bear this bird in their coat of arms. It is found in *Cornwall*, *Flintſhire*, *Caernarvonſhire*, and *Angleſea*, in the cliffs and caſtles along the ſhores; and in different parts of *Scotland* as far as *Straithnavern*; and in ſome of the *Hebrides.* They are alſo found in ſmall numbers on *Dover* cliff, where they came by accident: A gentleman in that neighborhood had a pair ſent as a preſent from *Cornwall*, which eſcaped, and ſtocked thoſe rocks. They ſometimes deſert the place for a week or ten days at a time, and repeat it ſeveral times in the year.

DESCRIP. Its weight is thirteen ounces: the breadth thirty-three inches: the length ſixteen: its color is wholly black, beautifully gloſſed over with blue and purple: the legs and bill are of a bright orange, inclining to red: the tongue almoſt as long as the bill, and a little cloven: the claws large, hooked, and black. *Scopoli* ſays that in *Carniola* the feet of ſome, during autumn, turn black.

81. JACK-DAW.

Chouca, Chouchette, ou Chouette. *Belon av.* 286.
Gracculus, ſeu monedula. *Geſner av.* 521.
*Aldr. av.* I. 387.
*Wil. orn.* 125.
*Raii ſyn. av.* 40.
Le Choucas. *Briſſon av.* 24.
*Scopoli*, No. 38.
Mulacchia nera. *Zinan.* 70.
Corvus monedula. *Lin. ſyſt.* 156.
Kaja. *Faun. Suec. ſp.* 89.
*Daniſh* Alike. *Norw.* Kaae, Kaye, Raun Kaate, Raage. *Br.* 31.
Tagerl, Dohle, Tſchockerl. *Kram.* 334.
Graue-Dohle. *Friſch*, I. 67.
*Br. Zool.* 78.
*Hiſt. d'Oys.* III. 69.

DESCRIP. THE jack-daw weighs nine ounces: the length thirteen inches: the breadth twenty-eight. The head is large in proportion

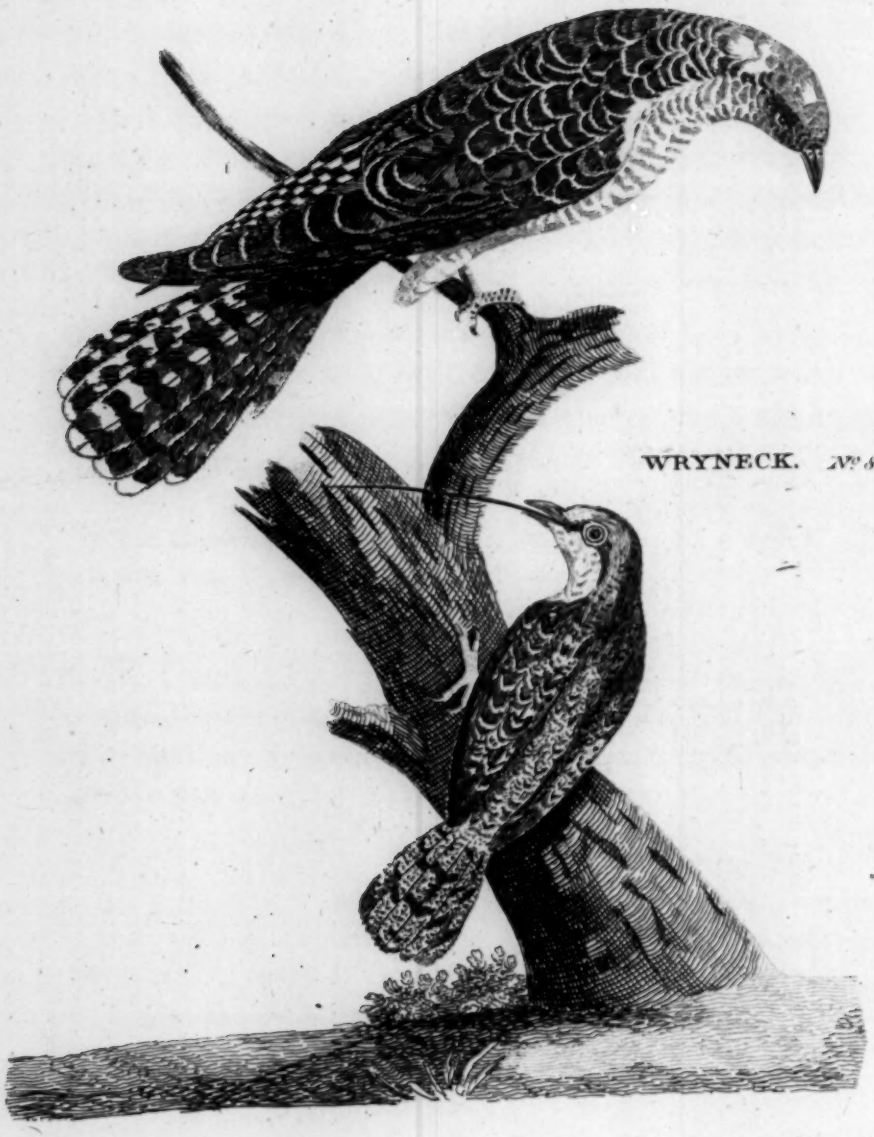
to

to its body; which Mr. *Willughby* ſays argues him to be ingenious and crafty. The irides are white: the forehead is black: the hind part of the head a fine light grey: the breaſt and belly of duſky hue, inclining to aſh-color: the reſt of the plumage is black, ſlightly gloſſed with blue: the feet and bill black: the claws very ſtrong, and hooked. It is a docil loquacious bird.

Jack-daws breed in ſteeples, old caſtles, and in high rocks; laying five or ſix eggs. I have known them ſometimes to breed in hollow trees near a rookery, and join thoſe birds in their foraging parties. In ſome parts of *Hampſhire* they make their neſts in rabbet holes: they alſo build in the interſtices between the upright and tranſome *ſtones* of *Stone-Henge*; a proof of the prodigious height of that ſtupendous antiquity; for their neſts are placed beyond the reach of the ſhepherd-boys, who are always idling about the ſpot. They are gregarious birds; and feed on inſects, grain, and ſeeds *.

* The Caryocatactes, *Wil. orn.* 132. *Edw. tab.* 240. a bird of this genus, was ſhot near *Moſtyn*, *Flintſhire*, in *October*, 1753; ſuppoſed to have ſtraggled from *Germany*, where they are common: and the Roller, another bird of this claſs, was killed near *Helſtone bridge*, *Cornwall*, in the autumn, 1766. It is alſo a native of *Germany*; and is far the moſt beautifull of the *European* birds. As an acquaintance with theſe wanderers may be agreeable to our readers, we have given its figure, as well as that of the former. The one is copied from Mr. *Edwards*; the other from a drawing by *Paillou*. *Vide Appendix.*

F. CUCKOO.



WRYNECK. *No. 89.*

Bill a little arched.
Short tongue.
Ten feathers in the tail.
Climbing feet.

V.
CUCKOO.

Le Coqu. *Belon av.* 132.
Cuculus. *Geſner av.* 362.
*Aldr. av.* I. 20.
Cuculo. *Olina* 38.
*Wil. orn.* 97.
*Raii ſyn. av.* 23.
Le Coucou. *Briſſon av.* 105.

Cuculus canorus *Lin. ſyſt.* 168.
Gjok. *Faun. Suec. ſp.* 96.
*Daniſh* Gjoeg v. Kuk. *Norv.* Gouk. *Br.* 36.
Kuckuck. *Friſch.* I. 40, 41, 42.
Kuctuct. *Kram.* 337.
*Br. Zool.* 80. plate G. G. 1.
Kukautza. *Scopoli.* No. 48.

82. CUCKOO.

THIS ſingular bird appears in our country early in the ſpring, and makes the ſhorteſt ſtay with us of any bird of paſſage; it is compelled here, as Mr. *Stillingfleet* obſerves, by that conſtitution of the air which cauſes the fig-tree to put forth its fruit *. From the coincidence of the firſt appearance of the ſummer birds of paſſage, and the leafing and fruiting of certain plants; this ingenious writer would eſtabliſh a natural calendar in our rural œconomy; to inſtruct us in the time of ſowing our moſt uſeful ſeeds, or of doing ſuch work as depends on a certain temperament of the air. As the fallibility of human calendars need not be inſiſted on, we muſt recommend to our countrymen ſome attention to theſe fea-

* *Calendar of Flora. vid. Preface throughout.*

thered

thered guides, who come heaven-taught, and point out the true commencement of the ſeaſon *; their food being the inſects of thoſe ſeaſons they continue with us.

It is very probable, that theſe birds, or at leſt part of them do not entirely quit this iſland during winter; but that they ſeek ſhelter in hollow trees, and lie torpid, unleſs animated by unuſually warm weather. I have two evidences of their being heard to ſing as early as *February*: one was in the latter end of that month 1771, the other on the fourth 1769: the weather in the laſt was uncommonly warm; but after that they were heard no more, chilled again as I ſuppoſe into torpidity. There is an inſtance of their being heard in the ſummer time to ſing at midnight.

There is a remarkable coincidence between their ſong, and the ſeaſon of the mackerel's continuance in full roe; that is from about the middle of *April*, to the latter end of *June*.

The cuckoo is ſilent for ſome little time after his arrival: his note is a call to love, and uſed only by the male, who ſits perched generally on ſome dead tree, or bare bough, and repeats his ſong, which he loſes as ſoon as the amorous ſeaſon is over. In a trap, which we placed on a tree frequented by cuckoos, we caught not fewer than five male birds in one ſeaſon. His note is ſo uniform, that his name in all languages ſeems to have been derived from it; and in all other countries it is uſed in the ſame reproachful ſenſe.

The plain ſong *cuckoo* grey,
Whoſe note full many a man doth mark,
And dares not anſwer nay.

*Shakeſpear.*

* In *Sweden*, which is a much colder climate than our own, the cuckoo does not appear ſo early by near a month.

There

The reproach ſeems to ariſe from this bird making uſe of the bed or neſt of another to depoſit its eggs in; leaving the care of its young to a wrong parent; but *Juvenal* with more juſtice gives the infamy to the bird in whoſe neſt the ſuppoſititious eggs were layed,

*Tu tibi tunc* curruca *places* *.

A water-wagtail, a yellow hammer, or hedge-ſparrow ‡, is generally the nurſe of the young cuckoos; who, if they happen to be hatched at the ſame time with the genuine off-ſpring, quickly deſtroy them, by overlaying them as their growth is ſoon ſo ſuperior. This want in the cuckoo of the common attention other birds have to their young, ſeems to ariſe from ſome defect in its make, that diſables it from incubation; but what that is, we confeſs ourſelves ignorant, referring the inquiry to ſome ſkilful anatomiſt. A friend tells me that the ſtomach is uncommonly large, even ſo as to reach almoſt to the vent: may not the preſſure of that in a ſitting poſture, prevent incubation?

This bird has been ridiculouſly believed to change into a hawk, and to devour its nurſe on quitting the neſt, whence the *French* proverb *ingrat comme un coucou.* But it is not carnivorous, feeding only on worms and inſects: it grows very fat, and is ſaid to be as good eating as a land rail. The *French* and *Italians* eat them to

* *Sat.* VI. 275. † *Lib.* X. c. 9.

‡ I have been eye-witneſs to two inſtances: when a boy I ſaw a young cuckoo taken out of the neſt of a hedge ſparrow: and in 1773 took another out of that of a yellow hammer: the old yellow hammer ſeemed as anxious about the loſs as if it had been its proper offspring.

this day. The *Romans* admired them greatly as a food: *Pliny*† ſays, that there is no bird to compare with them for delicacy.

Descrip. The weight of the cuckoo is a little more than five ounces; the length is fourteen inches; breadth twenty-five. The bill black, very ſtrong, a little incurvated, and about two-thirds of an inch long. The irides yellow. The head, hind part of the neck, the coverts of the wings, and the rump are of a dove color; darker on the head and paler on the rump. The throat and upper part of the neck are of a pale grey; the breaſt and belly white, croſſed elegantly with undulated lines of black. The vent feathers of a buff color, marked with a few duſky ſpots. The wings are very long, reaching within an inch and a half of the end of the tail; the firſt quil feather is three inches ſhorter than the others; they are duſky, and their inner webs are barred with large oval white ſpots. The tail conſiſts of ten feathers of unequal lengths like thoſe of the butcher bird: the two middle are black tipt with white; the others are marked with white ſpots on each ſide their ſhafts. The legs are ſhort; and the toes diſpoſed two backwards and two forwards like the woodpecker, though it is never obſerved to run up the ſides of trees. The female differs in ſome reſpects. The neck before and behind is of a browniſh red: the tail barred with the ſame color and black, and ſpotted on each ſide the ſhaft with white. The young birds are brown mixed with ferruginous and black, and in that ſtate have been deſcribed by ſome authors as old ones.

Weak

VI. WRYNECK.

Weak BILL, ſlightly incurvated.
NOSTRILS bare.
TONGUE long, ſlender, armed at the point.
Ten flexible feathers in the TAIL.
Climbing FEET.

83. WRYNECK.

Le Tercou, Torcou, ou Turcot. *Belon av.* 306.
Jynx. *Geſner av.* 573.
*Aldr. av.* I. 421.
The Wryneck. *Wil. orn.* 138.
*Raii ſyn. av.* 44.
Le Torcol, Torquilla. *Briſſon av.* IV. 4. *Tab.* 1. *fig.* 1.
Collotorto, Verticella. *Zinan.* 72.
The Emmet Hunter. *Charlton ex.* 93.
Jynx torquilla. *Lin. ſyſt.* 172.
Gjoktyta. *Faun. Suec. ſp.* 97.
Bende-Hals. *Br.* 37.
Natterwindl, Wendhalſs. *Kram.* 336.
Dreh-Hals. *Friſch*, I. 38.
*Br. Zool.* 80. plate F.
Iſhudeſch. *Scopoli*, No. 50.

DESCRIP.

NATURE, by the elegance of its penciling the colors of this bird, hath made ample amends for their want of ſplendor. Its plumage is marked with the plaineſt kinds. A liſt of black and ferruginous ſtrokes divides the top of the head and back. The ſides of the head and neck are aſh colored, beautifully traverſed with fine lines of black and reddiſh brown. The quil feathers are duſky; but each web is marked with ruſt colored ſpots. The chin and breaſt are of a light yellowiſh brown, adorned with ſharp pointed bars of black. The tail conſiſts of ten feathers, broad at their ends and weak; of a pale aſh color, powdered with black and

red, and marked with four equidiſtant bars of black. The tongue is long and cylindric; for the ſame uſe as that of the woodpecker. The toes are alſo diſpoſed the ſame way. The bill is ſhort, weak, and a little arcuate. The irides are of a yellowiſh hazel.

The Wryneck we believe to be a bird of paſſage, appearing here in the ſpring before the cuckoo. The *Welſh* conſider it as the forerunner or ſervant of that bird, and call it *Gwâs y gog*, or the cuckoo's attendant: the *Swedes* regard it in the ſame light*.

The food of this ſpecies is inſects, but chiefly ants, for on examination we found the ſtomach of one filled with their remains. As the tongue of this bird, like that of the *Ant-bear* or *Tamandria*, is of an enormous length; it poſſibly not only makes uſe of it to pick thoſe inſects out of their retreat, but like that quadruped may lay it acroſs their path, and when covered with ants draw it into its mouth.

Its weight is one ounce and a quarter: the length ſeven inches; the breadth eleven. It takes its name from a manner it has of turning its head back to the ſhoulders; eſpecially when terrified: it has alſo the faculty of erecting the feathers of the head like thoſe of the jay. Its note is like that of the *Keſtril*, a quick repeated ſqueak. Its eggs are white, and have ſo thin a ſhell that the yolk may be ſeen through it. This bird builds in the hollows of trees, making its neſt of dry graſs, in which we have counted nine young.

* Jynx hieme non apparet, vere autem remigrans, cuculi, poſt quatuordecem dies, adventum ruricolis annuntiat. *Amæn. acad.* IV. 584.

Strait ſtrong angular BILL. Noſtrils covered with briſtles. VII. WOODPECKER.
TONGUE very long, ſlender, and armed at the point with a ſharp bony point.
TEN ſtiff feathers in the tail.
Climbing feet.

Le Pic mart, Pic verd, Pic jaulne. *Belon av.* 299.
*Geſner av.* 710.
Pico verde. *Aldr. av.* I. 416.
Green Woodpecker, or Woodſpite; called alſo the Rain Fowl, High Hoe, and Hewhole. *Wil. orn.* 135.
*Raii ſyn. av.* 42.
Le Pic verd. *Briſſon av.* 4. 9.
Picus viridis. *Lin. ſyſt.* 175. 84. GREEN.
Wedknar, Gronſpik, Grongjoling. *Faun. Suec. ſp.* 99.
*Haſſelquiſt itin. Ter. Sanct.* 291.
*Girald. Cambrens.* 191.
*Daniſh & Norv.* Groenſpet. *Br.* 39.
Grunſpecht. *Kram.* 334. *Friſch*, I. 35.
*Br. Zool.* 78. plate E.
Deteu, Detela. *Scopoli*, No. 52.

THE wiſdom of Providence in the admirable contrivance of the fitneſs of the parts of animals to their reſpective nature, cannot be better illuſtrated than from this genus: which we ſhall give from the obſervations of our illuſtrious countryman Mr. *Ray**.

Theſe birds feed entirely on inſects: and their principal action is that of climbing up and down the bodies or boughs of trees: for the firſt purpoſe they are provided with a long ſlender tongue, armed with a ſharp bony end barbed on each ſide, which by the

* *Ray* on the Creation, p. 143.

means

means of a curious apparatus of muſcles * they can exert at pleaſure, darting it to a great length into the clifts of the bark, transfixing and drawing out the inſects that lurk there.

Nest. They make their neſts in the hollows of trees: in order therefore to force their way to thoſe cavities, their bills are formed ſtrong, very hard, and wedge-like at the end; Dr. *Derham* obſerves, that a neat ridge runs along the top, as if an artiſt had deſigned it for ſtrength and beauty. Yet it has not power to penetrate a ſound tree: their perforation of any tree is a warning to the owner to throw it down.

Their legs are ſhort, but ſtrong; their thighs very muſcular: their toes diſpoſed, two backwards, two forward: the feathers of the tail are very ſtiff, ſharp pointed and bending downwards. The three firſt circumſtances do admirably concur to enable them to run up and down the ſides of trees with great ſecurity; and the ſtrength of the tail ſupports them firmly when they continue long in one place, either where they find plenty of food, or while they are forming an acceſs to the interior part of the timber. This form of the tail makes their flight very awkward, as it inclines their body down, and forces them to fly with ſhort and frequent jerks when they would aſcend, or even keep in a line.

This ſpecies feeds oftener on the ground than any other of the genus: all of them make their neſts in the hollows of trees; and

Eggs. lay five or ſix eggs, of a beautifull ſemitranſparent white.

Descrip. This kind weighs ſix ounces and a half. Its length is thirteen inches; the breadth twenty and a half: the bill is duſky, triangular, and near two inches long: the crown of the head is crimſon,

* *Phil. Tranſ. Martin's abridg.* V. p. 55. plate 2.

ſpotted

ſpotted with black. The eyes are ſurrounded with black, beneath which (in the males only) is a rich crimſon mark. The back, neck, and leſſer coverts of the wings are green. The rump of a pale yellow. The greater quil feathers are duſky, ſpotted on each ſide with white. The tail conſiſts of ten ſtiff feathers, whoſe ends are generally broken as the bird reſts on them in climbing; their tips are black: the reſt of each is alternately barred with duſky and deep green. The whole under part of the body is of a very pale green; and the thighs and vent marked with duſky lines. The legs and feet are of a cinereous green.

L'epeiche, Cul rouge, Pic rouge. *Belon av.* 300.
Picus varius, ſeu albus. *Geſner av.* 709.
Greater ſpotted Woodpecker, or Witwal. *Wil. orn.* 137.
*Raii ſyn. av.* 43.
Picchio. *Zinan.* 73.
Le grand Pic varié. *Briſſon av.* IV. 34.
Picus major. *Lin. ſyſt.* 176.
Gyllenrenna. *Faun. Suec. ſp.* 100.
Hakke-ſpeet. *Brunnich*, 40.
Groſſes Baumhackl. *Kram.* 336.
Bunt Specht. *Friſch*, I. 36.
*Br. Zool.* 79. plate E.
Kobilar. *Scopoli*, No. 53.

85. GREAT SPOTTED.

THIS ſpecies weighs two ounces three quarters: the length is nine inches; the breadth is ſixteen. The bill is one and a quarter long, of a black horn color. The *irides* are red. The forehead is of a pale buff color. The crown of the head a gloſſy black. The hind part marked with a rich deep crimſon ſpot: the cheeks white; bounded beneath by a black line that paſſes from the corner of the mouth, and ſurrounds the hind part of the head. The neck is encircled with a black color. The throat and breaſt are of a yellowiſh white. The vent feathers of a fine

DESCRIP.

fine light crimſon. The back, rump, and coverts of the tail, and leſſer coverts of the wings are black; the ſcapular feathers and coverts adjoining to them are white. The quil feathers black, elegantly marked on each web with round white ſpots.

Tail. The four middle feathers of the tail are black, the next tipt with dirty yellow; the bottoms of the two outmoſt black; the upper parts a dirty white. The exterior feather marked on each web with two black ſpots; the next with two on the inner web, and only one on the other. The legs are of a lead color. The

Female. female wants that beautiful crimſon ſpot on the head; in other reſpects the colors of both agree. This ſpecies is much more uncommon than the preceding; and keeps altogether in the woods.

86. Middle. Picus medius. P. albo nigroque varius, criſſo pileoque rubris. *Lin. ſyſt.* 176. *Faun. Suec. ſp.* 82. *Scopoli*, No. 54. Le Pic varié. *Briſſon av.* IV. 38.

THIS ſpecies agrees with the preceding in colors and ſize, excepting that the crown of the head in this is of a rich crimſon; the crown of the head in the male of the former black; and the crimſon is in form of a bar on the hind part.

Birds thus marked have been ſhot in *Lancaſhire*, and other parts of *England*; but I am doubtfull whether they are varieties, or diſtinct ſpecies.

Geſner

Nos. 86 & 87

MIDDLE & LITTLE SPOTTED WOODPECKERS.

*Geſner av.* 709.
*Aldr. av.* I. 416.
Leſſer ſpotted Woodpecker, or Hickwall. *Wil. orn.* 138.
*Raii ſyn. av.* 43.
Picus minor. *Lin. ſyſt.* 176.
Le petit Pic varié. *Briſſon av.* iv. 41.
*Faun. Suec. ſp.* 192. *Scopoli.* No. 55.
*Haſſelquiſt itin.* 242.
Kleiner Bunt-Specht. *Friſch.* I. 37.
Kleiner Baumhackl. *Kram.* 336.
*Br. Zool.* 79. plate E.

87. LEST SPOTTED.

THIS ſpecies is the leſt of the genus, ſcarce weighing an ounce; the length is ſix inches; the breadth eleven. The forehead is of a dirty white: the crown of the head (in the male) of a beautiful crimſon: the cheeks and ſides of the neck are white, bounded by a bed of black beneath the former. The hind part of the head and neck, and the coverts of the wings are black: the back is barred with black and white: the ſcapulars and quil feathers ſpotted with black and white: the four middle feathers of the tail are black; the others varied with black and white: the breaſt and belly are of a dirty white: the crown of the head (in the female) is white; the feet are of a lead color. DESCRIP.

IT has all the characters and actions of the greater kind, but is not ſo often met with.

VIII. KINGFISHER.

Strait, ſtrong, ſharp pointed BILL.
Tongue ſhort and pointed.
Three loweſt joints of the outmoſt TOE connected to the middle toe.

88. KINGFISHER

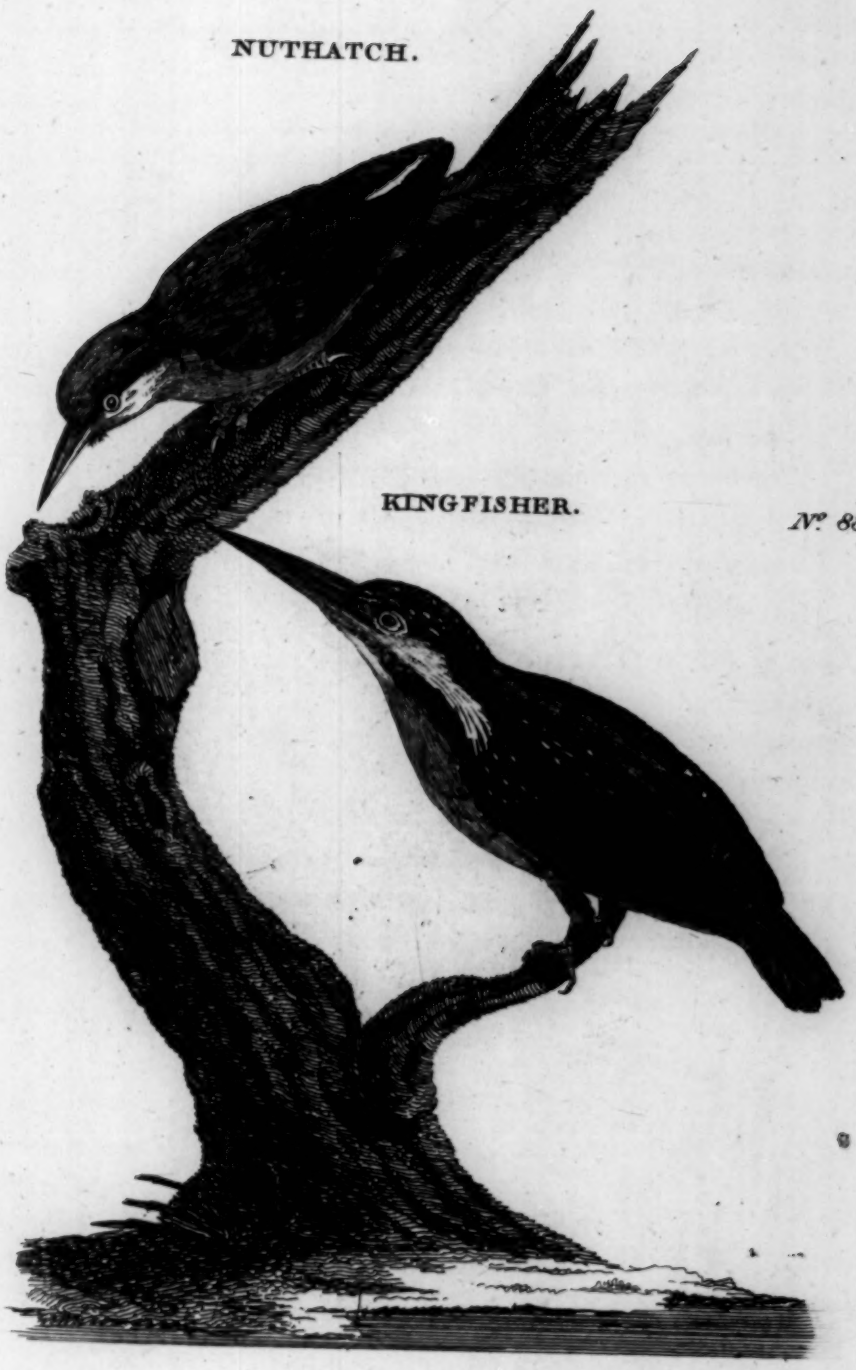
Le Martinet peſcheur. *Belon av.* 218.
Iſpida (Isfogel) *Geſner av.* 571. *Aldr. av.* III. 200. *Olina* 39, 40. *Wil. orn.* 146. *Raii ſyn. av.* 48. *Pl. Enl.* 77.
Alcedo iſpida. *Lin. ſyſt.* 179
Le Martin-pêcheur. *Briſſon av.* iv. 471.
Piombino, Martino peſcatore, Peſcatore del re. *Zinan* 116.
Isfogel. *Muſ. Fr. ad.* 16. *Scopoli*, No. 64.
Jis-fugl. *Brunnich in Append.*
Eisvogel. *Friſch.* II. 223.
Meerſchwalbe. *Kram.* 337.
*Br. Zool.* 82. plate I.

DESCRIP. THIS bird weighs an ounce and a quarter: its length is ſeven inches; its breadth eleven: its ſhape is very clumſy, the head and bill being very large, and the legs diſproportionably ſmall: the bill is two inches long; the upper mandible black, the lower yellow: the irides are red: the colors of this bird atone for its inelegant form: the crown of the head, and the coverts of the wings are of a deep blackiſh green, ſpotted with bright azure: the ſcapular feathers, and coverts of the tail are alſo of a moſt ſplendent azure: the whole underſide of the body is orange colored; a broad mark of the ſame paſſes from the bill beyond the eyes; beyond that is a large white ſpot: the tail is ſhort, and conſiſts of twelve feathers of a rich deep blue: the feet are of a reddiſh yellow: the three lower joints

NUTHATCH.

KINGFISHER.

N.º 88



joints of the outmoſt toe adhere to the middle toe: the inner toe adheres to it by one jont.

The kingfiſher frequents the banks of rivers, and feeds on fiſh. To compare ſmall things to great, it takes its prey after the manner of the *oſprey*, balancing itſelf at a certain diſtance over the water for a conſiderable ſpace, then darting below the ſurface, brings the prey up in its feet. While it remains ſuſpended in the air, in a bright day, the plumage exhibits a moſt beautiful variety of the moſt dazzling and brilliant colors. This ſtriking attitude did not eſcape the notice of the antients, for *Ibycus*, as quoted by *Athenæus*, ſtyles theſe birds ἀλκυονες ταννσιπτεροι *, the *halcyons* with expanded wings. It makes its neſt in holes in the ſides of the cliffs, which it ſcoops to the depth of three feet; and lays from five to nine eggs †, of a moſt beautiful ſemi-tranſparent white. The neſt is very fetid, by reaſon of the remains of the fiſh brought to feed the yonng.

This ſpecies is the ἀλκυωναφων☉, or mute *halcyon* of *Ariſtotle* ‡, which he deſcribes with more preciſion than is uſual with that great philoſopher: after his deſcription of the bird, follows that of its neſt, than which the moſt inventive of the antients have delivered nothing that appears at firſt ſight more fabulous and extravagant. He relates, that it reſembled thoſe concretions that are formed by the ſea-water; that it reſembled the long necked gourd, that it was hollow within, that the entrance was very narrow, ſo that ſhould NEST.

* P. 388.

† *Geſner* ſays he found nine young in one neſt.

‡ *Hiſt. an.* 892, 1050.

it overſet the water could not enter; that it reſiſted any violence from iron, but could be broke with a blow of the hand; and that it was compoſed of the bones of the Βελόνη or ſea-needle *.

The neſt had medical virtues aſcribed to it; and from the bird was called *Halcyoneum*. In a fabulous age every odd ſubſtance that was flung aſhore received that name; a ſpecies of tubular coral, a ſponge, a zoophyte, and a miſcellaneous concrete having by the antients been dignified with that title from their imaginary origin†. Yet much of this ſeems to be founded on truth. The form of the neſt agrees moſt exactly with the curious account of it that Count *Zinanni* has favored us with ‡. The materials which *Ariſtotle* ſays it was compoſed of, are not entirely of his own invention. Whoever has ſeen the neſt of the kingfiſher, will obſerve it ſtrewed with the bones and ſcales of fiſh; the fragments of the food of the owner and its young: and thoſe who deny that it is a bird that frequents the ſea, muſt not confine their ideas to our northern ſhores; but reflect, that birds that inhabit a ſheltered place in the more rigorous latitudes, may endure expoſed ones in a milder clime. *Ariſtotle* made his obſervations in the eaſt: and allows, that the

* 1050. See alſo *Ælian.* lib. ix. c. 17. *Plin.* lib. x. c. 32

† *Plin.* lib. xxxii. c. 8. *Dioſc.* lib. v. c. 94.

‡ Nidifica egli nelle ripe degli acquidotti, o de piccoli torrenti vicino al mare, formando però il nido nei ſiti più alti di dette ripe, acciocchè l'eſcreſcenza delle acque non poſſa inſinuarſi nel di lui foro; e fa egli detto nido incavando internamente il terreno in tondo per la lunghezza di tre piedi, e riducendo il fine di detto foro a foggia di batello, tutto coperto di ſcaglie di peſci, che reſtano vagamente intrecciate; ma forſe non ſono così diſpoſte ad arte, bensì per accidente.

*halcyon*

*halcyon* ſometimes aſcended rivers*; poſſibly to breed: for we learn from *Zinanni*, that in his ſoft climate, *Italy*, it breeds in *May*, in banks of ſtreams that are near the ſea; and having brought up the firſt hatch, returns to the ſame place to lay a ſecond time.

On the foundation laid by the philoſopher, ſucceeding writers formed other tales extremely abſurd; and the poets, indulging the powers of imagination, dreſſed the ſtory in all the robes of romance. This neſt was a floating one;

Incubat *halcyone* pendentibus æquore nidis†.

it was therefore neceſſary to place it in a tranquil ſea, and to ſupply the bird with charms to allay the fury of a turbulent element during the time of its incubation; for it had, at that ſeaſon, power over the ſeas and the winds.

Χ' ἀλκυόνες ϝορεσεῦντι τὰ κύματα, τὴν τε θάλασσαν,
Τόν τε νοτον, τὸν τ' εὖρον, ὃς ἔσχατα φυκία κινεῖ·
Ἀλκυόνες, γλαυκαῖς Νηρηίσι ταί τε μάλιστα
Ορνίθων ἐφίλαθεν. *Theocrit. Idyl.* vii. l. 57.

May *Halcyons* ſmooth the waves, and calm the ſeas,
And the rough ſouth-eaſt ſink into a breeze;
*Halcyons* of all the birds that haunt the main,
Moſt lov'd and honor'd by the *Nereid* train.

*Fawkes.*

Theſe birds were equally favourites with *Thetis* as with the *Nereids*;

* Αναβαίνει δε τε επὶ τες ποταμες. Hiſt. an. 1050.

† *Ovid Met.* lib. xi.

Dilectæ

Dilectæ *Thetidi* Halcyones. *Virg. Georg.* I. 399.

As if to their influence theſe deities owed a repoſe in the midſt of the ſtorms of winter, and by their means were ſecured from thoſe winds that diſturb their ſubmarine retreats, and agitated even the plants at the bottom of the ocean.

Such are the accounts given by the *Roman* and *Sicilian* poets. *Ariſtotle* and *Pliny* tell us, that this bird is moſt common in the ſeas of *Sicily:* that it ſat only a few days, and thoſe in the depth of winter; and during that period the mariner might ſail in full ſecurity; for which reaſon they were ſtiled, *Halcyon days**.

Perque dies placidos hiberno tempore ſeptem
Incubat *Halcyone* pendentibus æquore nidis:
Tum via tuta maris: ventos cuſtodit, et arcet
Æolus egreſſu. *Ovid. Met.* lib. XI.

*Alcyone* compreſs'd,
Seven days ſits brooding on her watery neſt
A wintry queen; her fire at length is kind,
Calms every ſtorm and huſhes every wind. *Dryden.*

In after times, theſe words expreſſed any ſeaſon of proſperity: theſe were the *Halcyon days* of the poets; the brief tranquillity; the *ſeptem placidi dies* of human life.

The poets alſo made it a bird of ſong: *Virgil* ſeems to place it in the ſame rank with the *Linnet:*

Littoraque *Halcyonem* reſonant, & *Acanthida* dumi.
*Georg.* III. 338.

* *Ariſt. hiſt. an.* 541. *Plin.* lib. x. c. 32. lib. xviii. c. 24. Αλκυονεια ημερα of the former; and *dies halcyonides* of the latter.

And

And *Silius Italicus* celebrates its muſic, and its floating neſt:

Cum ſonat *Halcyone* cantu, nidoſque natantes
Immotâ geſtat ſopitis fluctibus undâ. *Lib.* XIV. 275.

But we ſuſpect that theſe writers have transferred to our ſpecies, the harmony that belongs to the *vocal alcedo* of the philoſopher, καὶ ἡ μὲν φθέγγεται, καθιζάνουσα επι τῶν δονάκων *, *which was vocal and perched upon reeds*. *Ariſtotle* ſays, it is the leſt of the two, but that both of them have a cyanean back †. *Belon* labors to prove the *vocal alcedo* to be the *rouſſerole*, or the *greater reed ſparrow* ‡, a bird found in *France* and ſome other parts of *Europe*, and of a very fine note: it is true that it is converſant among reeds, like the bird deſcribed by *Ariſtotle*; but as its colors are very plain, and that ſtriking character of the fine blue back is wanting, we cannot aſſent to the opinion of *Belon*; but rather imagine it to be one of the loſt birds of the antients.

Thoſe who think we have ſaid too much on this ſubject, ſhould conſider how incumbent it is on every lover of ſcience, to attempt placing the labors of the antients in a juſt light: to clear their works from thoſe errors, that owe their origin to the darkneſs of the times; and to evince, that many of their accounts are ſtrictly true; many founded on truth; and others contain a mixture of fable and reality, which certainly merit the trouble of ſeparation. It is much to be lamented that travellers, either on claſſic or any

* *Hiſt. an.* 892.

† Νῶτον κυανεον, the color of the *cyanus*, or *lapis lazuli*.

‡ Le Rouſſerolle, *Belon av.* 221. Le Roucherolle, *Briſſon av.* II. 218. Greater reed ſparrow, *Wil. orn.* 143. Turdus arundinaceus, *Lin. ſyſt. ſp.* 296.

other

other ground, have not been more aſſiduous in noting the zoology of thoſe countries, which the antients have celebrated for their productions: for, from thoſe who have attended to that branch of natural knowledge, we have been able to develope the meaning of the old naturaliſts; and ſettle with preciſion ſome few of the animals of the antients.

*Italy*, a country crowded with travellers of all nations, hath not furniſhed a ſingle writer on claſſical zoology. The *Eaſt* has been more fortunate: *Belon*, the firſt voyager who made remarks in natural hiſtory during his travels, mentions many of the animals of the places he viſited, and may be very uſeful to aſcertain thoſe of *Ariſtotle*, eſpecially as he has given their modern *Greek* names. Our countryman, Dr. *Ruſſel*, enumerates thoſe of *Syria*. Dr. *Haſſelquiſt* has made ſome additions to the ornithology of *Egypt*: but all theſe fall ſhort of the merits of that moſt learned and inquiſitive traveller, Dr. *Shaw*; who with unparalleled learning and ingenuity, has left behind him the moſt ſatisfactory, and the moſt beautiful comments on the animals of the antients, particularly thoſe mentioned in HOLY WRIT, or what relates to the *Ægyptian* mythology: ſuch as do honor to our country, and we flatter ourſelves will prove incentives to other travellers, to complete what muſt prove ſuperior to any one genius, be it ever ſo great: from ſuch we may be ſupplied with the means of illuſtrating the works of the antient naturaliſts; whilſt commentators, after loading whole pages with unenlightening learning, leave us as much in the dark, as the age their authors wrote in.

Le

Strait triangular BILL.
Short TONGUE, horny at the end, and jagged.

IX. NUTHATCH.

Le grand Grimpereau, le Torchepot. *Belon av.* 304.
Picus cinereus, ſeu Sitta. *Geſner av.* 711.
Ziolo. *Aldr. av.* I. 417.
The Nuthatch, or Nut-jobber. *Will. orn.* 142.
*Raii ſyn. av.* 47.
The Woodcracker. *Plott's hiſt. Ox.* 175.
Sitta Europæa. *Lin. ſyſt.* 177.
Le Torchepot, Sitta. *Briſſon av.* III. 588. *tab.* 29. *fig.* 3.
Picchio grigio, Raparino. *Zinan.* 74.
Notwacka, Notpacka. *Faun. Suec. ſp.* 104.
*Daniſh* Spœtt-meiſe. *Norv.* Nat-Bake. *Br.* 42.
Klener, Nuſſzhacker. *Kram.* 362.
Blau-ſpecht. *Friſch*, I. 39.
*Br. Zool.* 81. plate H.
Barleſs. *Scopoli*, No. 57.

89. NUTHATCH.

THE nuthatch weighs near an ounce; its length is near five inches three-quarters; breadth nine inches; the bill is ſtrong and ſtrait, about three quarters of an inch long; the upper mandible black, the lower white: the irides hazel; the crown of the head, back, and coverts of the wings are of a fine bluiſh grey: a black ſtroke paſſes over the eye from the mouth: the cheeks and chin are white: the breaſt and belly of a dull orange color; the quil feathers duſky; the wings underneath are marked with two ſpots, one white at the root of the exterior quils; the other black at the joint of the baſtard wing; the tail conſiſts of twelve feathers; the two middle are grey: the two exterior feathers tipt with grey, then ſucceeds a tranſverſe white ſpot; beneath that the reſt is black; the legs are of a pale yellow; the back toe very ſtrong, and the claws large.

DESCRIP.

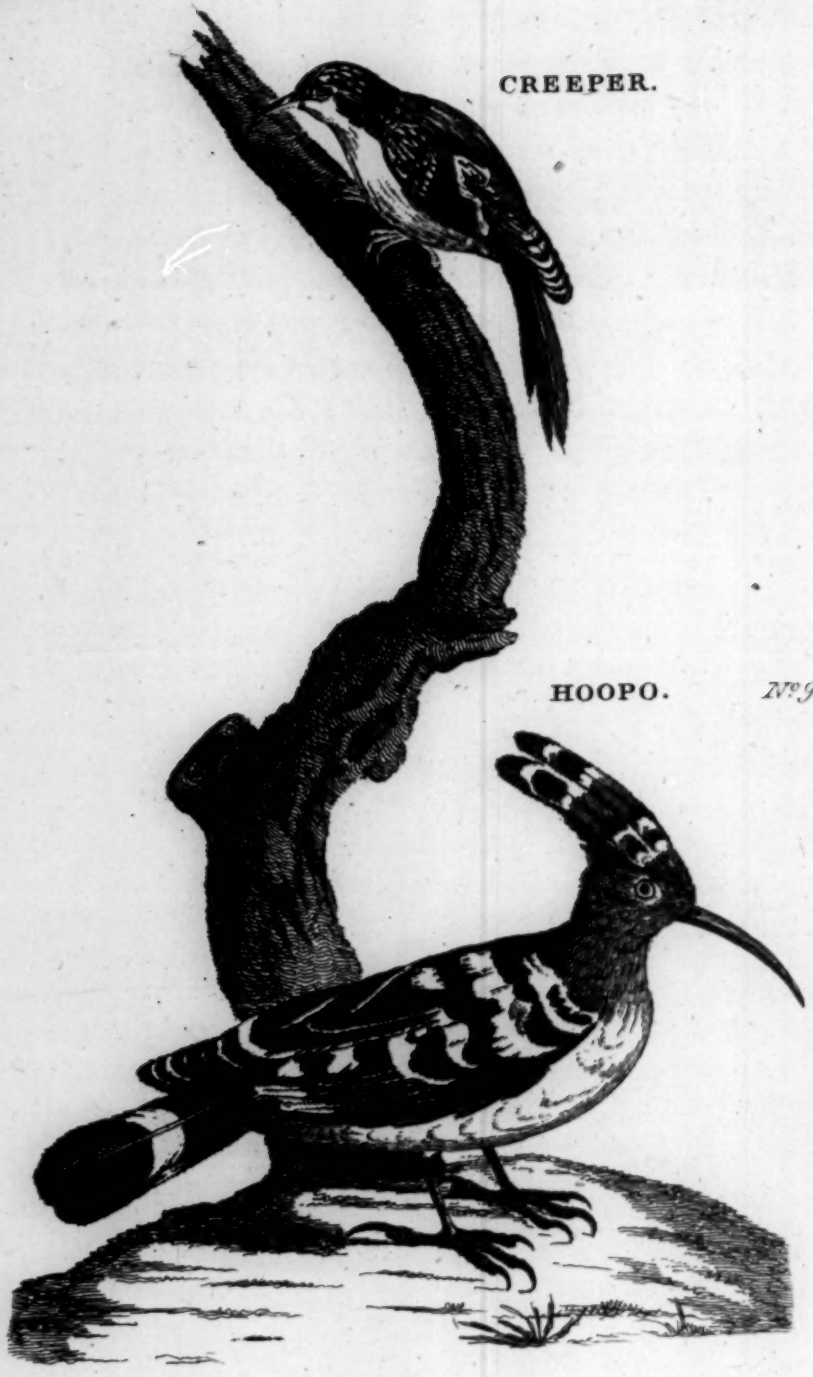
This bird runs up and down the bodies of trees, like the woodpecker tribe; and feeds not only on inſects, but nuts, of which it lays up a conſiderable proviſion in the hollows of trees: it is a pretty ſight, ſays Mr. *Willughby*, to ſee her fetch a nut out of her hoard, place it faſt in a chink, and then ſtanding above it with its head downwards, ſtriking it with all its force, breaks the ſhell, and catches up the kernel: it breeds in the hollows of trees; if the entrance to its neſt be too large, it ſtops up part of it with clay, leaving only room enough for admiſſion: in autumn it begins to make a chattering noiſe, being ſilent for the greateſt part of the year. *Doctor Plott* tells us, that this bird, by putting its bill into a crack in the bough of a tree, can make ſuch a violent ſound as if it was rending aſunder, ſo that the noiſe may be heard at leſt twelve ſcore yards.

Slender

Pl. XXXIX

Nº 91

CREEPER.



HOOPO. Nº 90

Slender incurvated BILL.
Very ſhort TONGUE.
Ten feathers in the TAIL.

X.
HOOPOE.

La Huppe. *Belon av.* 293.
Upupa. *Geſner av.* 776.
*Aldr. av.* II. 314.
Bubbola. *Olina*, 36.
The Hoop, or Hoopoe. *Wil. orn.* 145.
*Raii ſyn. av.* 48.
The Dung Bird. *Charlton ex.* 98. *tab.* 99.
*Plott's Oxf.* 177.
*Edw.* 345.
*Pl. enl.* 52.

La Hupe ou Puput. *Briſſon av.* III. 90. HOOPOE.
455. *tab.* 43.
Upupa epops. *Lin. ſyſt.* 183.
Harfogel, Pop. *Faun. Suec. ſp.* 105.
Ter Chaous *Pococke Trav.* I. 209.
Her-fugl. *Brunnich.* 43.
Widhopf. *Kram.* 337.
Upupa; arquata ſtercoraria; gallus lutoſus. *Klein Stem. av.* 24. *tab.* 25.
*Br. Zool.* 83. plate L.
Smerda kaura. *Scopoli.* No. 62.

THIS bird may be readily diſtinguiſhed from all others that viſit theſe iſlands by its beautiful creſt, which it can erect or depreſs at pleaſure: it weighs three ounces: its length is twelve inches: its breadth nineteen: the bill is black, two inches and a half long, ſlender, and incurvated: the tongue triangular, ſmall, and placed low in the mouth: the irides are hazel: the creſt conſiſts of a double row of feathers; the higheſt about two inches long: the tips are black, their lower part of a pale orange color: the neck is of a pale reddiſh brown: the breaſt and belly white; but in young birds marked with narrow duſky lines pointing down: the leſſer coverts of the wings are of a light brown: the back, ſcapulars and wings croſſed with broad bars of white and black: the rump is white: the tail conſiſts of only ten feathers, white marked with black, DESCRIP.

black, in form of a creſcent, the horns pointing towards the end of the feathers. The legs are ſhort and black: the exterior toe is cloſely united at the bottom to the middle toe.

According to *Linnæus* it takes its name from its note*, which has a ſound ſimilar to the word; or it may be derived from the *French huppè*, or creſted: it breeds in hollow trees, and lays two aſh-colored eggs: it feeds on inſects which it picks out of ordure of all kinds: the antients believed that it made its neſt of human excrement; ſo far is certain, that its hole is exceſſively fœtid from the tainted food it brings to its young: the country people in *Sweden* look on the appearance of this bird as a preſage of war;

——— Facies armata videtur.

And formerly the vulgar in our country eſteemed it a forerunner of ſome calamity: it viſits theſe iſlands frequently; but not at ſtated ſeaſons, neither does it breed with us. It is found in many parts of *Europe*, in *Egypt*, and even as remote as *Ceylon*. The *Turks* call it *Tir Chaous* or the meſſenger bird, from the reſemblance its creſt has to the plumes worn by the Chaous or *Turkiſh* couriers.

*Ovid* ſays that *Tereus* was changed into this bird:

Vertitur in volucrem, cui ſtant in vertice criſtæ,
Prominet immodicum pro longa cuſpide roſtrum:
Nomen *Epops* volucri. *Metam.* lib. vi. l. 672.

*Tereus*, through grief, and haſte to be reveng'd,
Shares the like fate and to a bird is chang'd.
Fix'd on his head the creſted plumes appear,
Long is his beak and ſharpen'd as a ſpear. *Croxall.*

* *Faun. Suec.* 2d *edit.* 37.

Very

Very ſlender BILL, very much incurvated.
Twelve feathers in the TAIL.

XI. CREEPER.

Le petit Grimpereau. *Belon av.* 375.
Certhia. *Geſner av.* 251.
*Aldr. av.* I. 424.
*Wil. orn.* 144.
*Raii ſyn. av.* 47.
The Oxeye Creeper. *Charlton ex.* 93.
Picchio piccolo. *Zinan.* 75.

Le Grimpereau. *Briſſon* III. 603.
*Cat. Carol.* app. 37.
Certhia familiaris. *Lin. ſyſt.* 184.
Krypare. *Faun. Suec. ſp.* 106.
Træe-Pikke v. Lie-Helten. *Br.* p. 12.
*Scopoli* No. 59.
Grau-Specht. *Friſch.* I. 39.
Baumlaufferl. *Kram.* 337.
*Br. Zool.* 82. plate K.

91. CREEPER.

THE creeper weighs only five drams: and next to the creſted wren is the leſt of the *Britiſh* birds: the manner it has of ruffling its feathers, and their length give it a much larger appearance than is real. The length of this bird is five inches and a half. DESCRIP. the breadth ſeven and a half: the bill is hooked like a ſickle: the irides hazel: the legs ſlender: the toes and claws very long, to enable it to creep up and down the bodies of trees in ſearch of inſects, which are its food: it breeds in hollow trees; and lays ſometimes twenty eggs: the head and upper part of the neck are brown, ſtreaked with black: the rump is tawny: the coverts of the wings are variegated with brown and black: the quil-feathers duſky, tipt

tipt with white, and edged and barred with tawny marks: the breaſt and belly are of a ſilvery white: the tail is very long, and conſiſts of twelve ſtiff feathers; notwithſtanding Mr. *Willughby* and other ornithologiſts give it but ten: they are of a tawny hue, and the interior ends of each ſlope off to a point.

Short

## WOOD GROUS.

P. Paillou pinx.

P. Mazell sculp.

## ORDER III. GALLINACEOUS.

Short arched BILL.

Outmoſt, and inner TOES connected to the firſt joint of the middle toe by a ſmall membrane.

XII. GROUS.

* With legs feathered to the feet: broad ſcarlet eye-brows.

** With naked legs.

92. WOOD.

Le Coc de bois ou Faiſan bruyant. *Belon av.* 249.
Urogallus major (the Male). *Geſner av.* 490.
Grygallus major (the Female). 495.
Gallo cedrone, Urogallus ſive Tetrao. *Aldr. av.* II. 29.
Gallo alpeſtre, Tetrax *Nemeſiani* (fem.) *Aldr. av.* II. 33.
Pavo ſylveſtris. *Giral d. Topogr. Hibern.* 706.
Cock of the Mountain, or Wood. *Will. orn.* 172. *Raii ſyn. av.* 53. *Pl. Enl.* 73. 74.
Capricalca. *Sib. Scot.* 16. *tab.* 14, 18.
Le cocque de Bruyeres. *Briſſon av.* I. 182. *Hiſt. d'Oys.* II. 191.
Tetrao urogallus. *Lin. ſyſt.* 273.
Kjader. *Faun. Suec. ſp.* 200. *Pontop.* II. 101.
Tjader-hona. *Haſſelquiſt itin.* † 571. *Klein Stem. tab.* 27.
Mas *Norvegis* Tiur, Teer, Toedder. Foemina *Norv.* Roey. *Brunnich*, 194.
Aurhan. *Kram.* 356.
Auerhahn. *Friſch*, I. 107, 108. *Br. Zool.* 84. plates M. M*. *Pl. Enl.* 73, 74.
Devi peteln. *Scopoli*, No. 169.

THIS ſpecies is found in no other part of *Great Britain* than the Highlands of *Scotland*, North of *Inverneſs*; and is very rare even in thoſe parts. It is there known by the name of *Caper-*

† *Swediſh* edition. This bird was ſhot in the iſle of *Milo*, on a *palm tree*. *Belon* tells us, it is often found in *Crete*; *Obſ.* p. 11. The *Engliſh* tranſlator of *Haſſelquiſt* gives a falſe name to the bird, calling it the *Black Game*.

*calze*,

*calze*, *Auer-calze*, and in the old law books *Caperkally*: the laſt ſignifying the horſe of the woods; this ſpecies being, in compariſon of others of the genus, pre-eminently large *. We believe that the breed is extinct in *Ireland*, where it was formerly found.

*Giraldus Cambrenſis*† deſcribes it under the title of *Peacock* of the wood, from the rich green that ſhines on the breaſt of the male. *Boethius*‡ alſo mentions it under the name of *Capercalze*; and truely deſcribes its food, the extreme ſhoots of the pine. He afterwards gives an exact deſcription of the *black cock*, but gives it the name of the cock of the wood, a name now confined to this ſpecies. Biſhop *Leſsly*‖ is a third of our hiſtorians who makes mention of this bird along with two others of the genus, the black cock and common grous; but the *Ptarmigan* is overlooked by them. None of theſe writers were converſant in the ſtudy of natural hiſtory, therefore are very excuſable for their inaccuracy.

It inhabits wooded and mountanous countries; in particular, foreſts of pines, birch trees and junipers; feeding on the tops of the former, and berries of the latter; the firſt infects often the fleſh with ſuch a taſte, as to render it ſcarcely eatable. In the ſpring it calls the females to its haunts with a loud and ſhrill voice; and is at that time ſo very inattentive to its ſafety, as to be very eaſily ſhot. It ſtands perched on a tree, and deſcends to the females on their firſt appearance. They lay from eight to ſixteen eggs; eight at the firſt, and more as they advance in age §.

* For the ſame reaſon the *Germans* call it *Aur-han*, or the *Urus* or wild ox cock.

† *Topogr. Hibern.* 706.

‡ Deſcr. Regni *Scotiæ*. 7.

‖ *Scotiæ* Deſcr. 24.

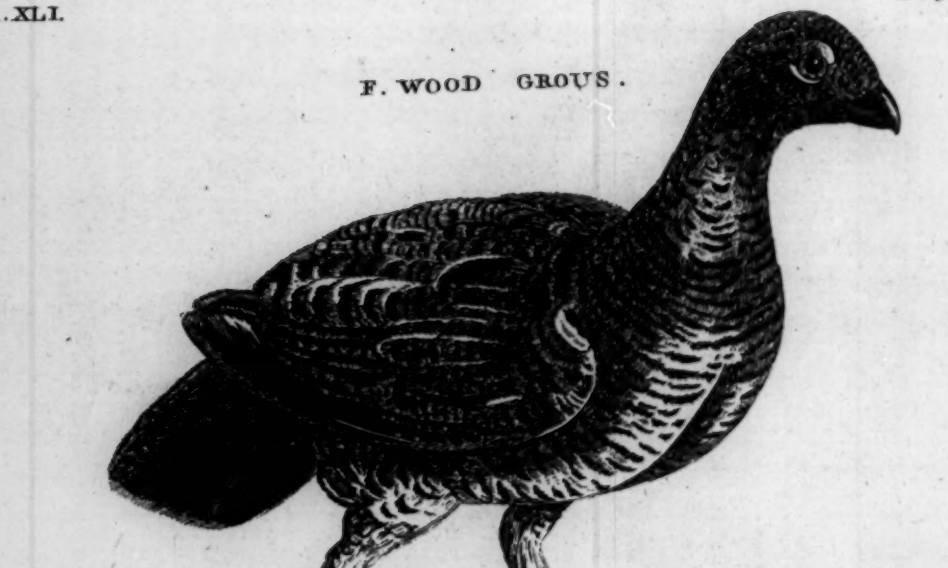
§ *Schwenckfelt* Aviarium *Sileſiæ*. 372.

Theſe

Pl. XLI.

*N°. 92.*

F. WOOD GROUS.



*P. Mazell sculp.*

Theſe birds are common to *Scandinavia*, *Germany*, *France*, and ſeveral parts of the *Alps*. In our country I have ſeen one ſpecimen at *Inverneſs*, a male, killed in the woods of Mr. *Chiſolme*, North of that place.

The length of the male is two feet eight inches; the breadth three feet ten: its weight ſometimes fourteen pounds. The female is much leſs, the length being only twenty-ſix inches; the breadth forty. The ſexes differ alſo greatly in colors. The bill of the male is of a pale yellow: the noſtrils are covered with duſky feathers: the head, neck and back are elegantly marked, ſlender lines of grey and black running tranſverſely. The feathers on the hind part of the head are long, and beneath the throat is a large tuft of long feathers. The upper part of the breaſt is of a rich gloſſy green; the reſt of the breaſt and the belly black, mixed with ſome white feathers: the ſides are marked like the neck: the coverts of the wings croſſed with undulated lines of black and reddiſh brown: the exterior webs of the greater quil feathers are black: at the ſetting on of the wings in both ſexes is a white ſpot; the inner coverts are of the ſame color: the tail conſiſts of eighteen feathers, the middle of which is the longeſt; are black, marked on each ſide with a few white ſpots: the vent feathers black mixed with white. The legs very ſtrong, covered with brown feathers: the edges of the toes pectinated. DESCRIP.

The female differs greatly from the male: the bill is duſky: the throat red: the head, neck and back are marked with tranſverſe bars of red and black: the breaſt has ſome white ſpots on it, and the lower part is of a plain orange color: the belly barred with pale orange and black; the tips of the feathers white. The feathers of the back and ſcapulars black, the edges mottled with black

and pale reddiſh brown; the ſcapulars tipt with white. The inner webs of the quil feathers duſky: the exterior mottled with duſky and pale brown. The tail is of a deep ruſt color barred with black, tipt with white, and conſiſts of ſixteen feathers.

*Geſner*, as Mr. *Willughby* * has long ſince obſerved, deceived by the very different plumage of the male and female of this kind, has formed of them two ſpecies.

93. BLACK. Urogallus minor (the Male). *Geſner av.* 493. Grygallus minor (the Female). 496.
Faſan negro, Faſiano alpeſtre, Urogallus ſive Tetrao minor Gallus Scoticus ſylveſtris. *Aldr. av.* II. 32. 160.
*Raii ſyn. av.* 53.
Heath-cock, black Game, or Grous. *Wil. orn.* 173.
Tetrao tetrix. *Lin. ſyſt.* 274.
Orre. *Faun. Suec. ſp.* 102.
Le Coq-de-bruyeres a queue fourchue. *Briſſon av.* I. 186. *Hiſt. d'Oys.* II. 210.
*Cimbris mas* Urhane, *fœmina* Urhoene. *Norvegis* Orrfugl. *Brunnich*, 196.
Berkhan, Schildhan. *Kram.* 356.
Birckhahn. *Friſch*, I. 109.
*Br. Zool.* 85. *tab.* M. 1. 2. *Pl. Enl.* 172, 173.
Gallo sforcello *Italis*. *Scopoli*, No. 169.

MANNERS. THESE birds, like the former, are fond of wooded and mountanous ſituations; they feed on bilberries, and other mountain fruits; and in the winter on the tops of the heath. They are often found in woods; this and the preceding ſpecies perching like the pheaſant: in the ſummer they frequently deſcend from the hills to feed on corn: they never pair; but in the ſpring the male gets upon ſome eminence, crows and claps his

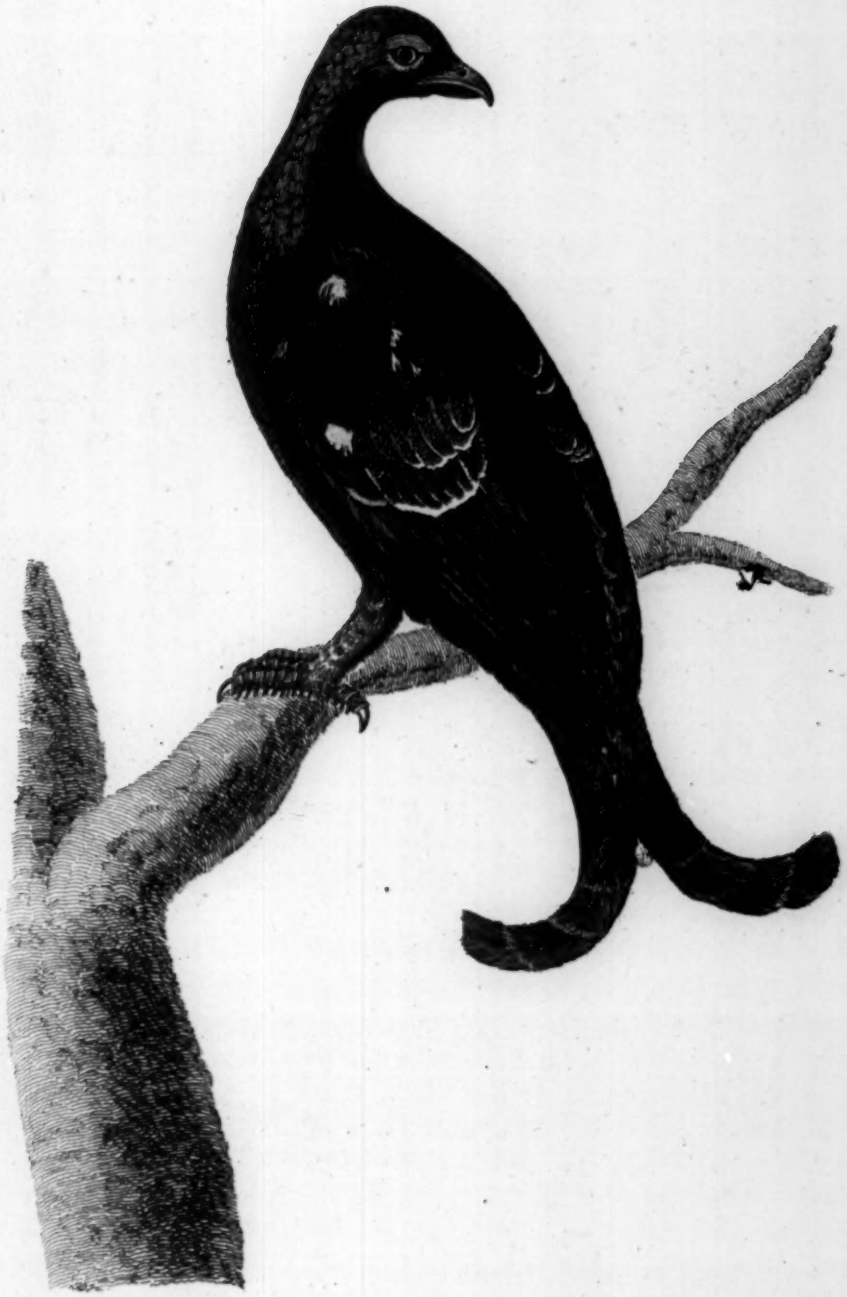
* *Wil. orn.* 173. *Geſner av.* 490. 495.

wings;

Pl. XLII.

No. 93.

## BLACK COCK.



wings *; on which ſignal all the females within hearing reſort to him: the hen lays ſeldom more than ſix or ſeven eggs. The young males quit their mother in the beginning of winter; and keep in flocks of ſeven or eight till ſpring; during that time they inhabit the woods: they are very quarrelſome, and will fight together like game cocks; and at that time are ſo inattentive to their own ſafety, that it has often happened that two or three have been killed at one ſhot.

DESCRIP. An old black cock weighs near four pounds: its length is one foot ten inches; its breadth two feet nine: the bill duſky: the plumage of the whole body black, gloſſed over the neck and rump with a ſhining blue. The coverts of the wings are of a duſky brown: the four firſt quil feathers are black, the next white at the bottom; the lower half of the ſecondary feathers white, and the tips are of the ſame color: the inner coverts of the wings white: the thighs and legs are covered with dark brown feathers; on the former are ſome white ſpots: the toes reſemble thoſe of the former ſpecies. The tail conſiſts of ſixteen black feathers, and is much forked; the exterior feathers bend greatly outwards, and their ends ſeem as if cut off. The feathers under the tail and inner coverts of the wings are of a pure white.

FEMALE. The female weighs only two pounds: its length is one foot ſix inches; its breadth two feet ſix. The head and neck are marked with alternate bars of dull red and black: the breaſt with duſky, black and white; but the laſt predominates. The back, coverts

* The ruffed heathcock of *America*, a bird of this genus, does the ſame. *Edw. Gl.* p. 80. The cock of the wood agrees too in this exultation during the amorous ſeaſon; at which time the peaſants in the *Alps*, directed by the ſound, have an opportunity of killing them.

of the wings and tail are of the ſame colors as the neck, but the red is deeper: the inner webs of the quil feathers are mottled with black and white: the inner coverts of the wings are white; and in both ſexes form a white ſpot on the ſhoulder. The tail is ſlightly forked; it conſiſts of eighteen feathers variegated with red and black. The feathers under the tail are white, marked with a few bars of black and orange. This bird hatches its young late in the ſummer. It lays from ſix to eight eggs, of a dull yellowiſh white color, marked with numbers of very ſmall ferruginous ſpecks; and towards the ſmaller end with ſome blotches of the ſame hue.

Mixed Breed.

Beſides the common ſpecies of black cock, M. *Briſſon* mentions a variety found in *Scotland*, under the name of *le coq de bruyere piqueté*, or ſpotted black cock. It differs from the common ſort in being ſpotted on the neck, breaſt, wings and thighs with red. This I ſuppoſe to have been a ſpurious breed between this and the former ſpecies, as the *Tetrao Hybridus* of *Linnæus* is. I could not learn that this mixed race was found at preſent in *North Britain*, perhaps becauſe the cock of the wood is now become ſo very rare. It is alſo found in *Sweden*, and deſcribed by *Linnæus* in his *Faun. Suec. ſp.* 201. by the title of *Tetrao caudâ bifurcâ ſubtus albo punctata*, in *Swediſh*, *Racklehane* or *Roſtare:* the legs of this and the preceding kind are feathered only to the feet: they both inhabit woods in the winter; therefore nature hath not given them the ſame kind protection againſt the cold, as ſhe has the grous and ptarmigan, who muſt undergo all the rigor of the ſeaſon beneath the ſnow, or on the bare ground.

Gallina campeſtris. *Girald. topogr. Hibern.* 706.
Red Game, Gorcock, or Moor-cock, *Wil. orn.* 177.
Lagopus altera Plinii. *Raii ſyn. av.* 54.
Moor-cock, or Moor-fowl. *Sib. Scot.* 16.
La Gelinote Hupée. *Briſſon av.* I. 209. *Hiſt. d'Oys.* II. 252.
La Gelinote d'Ecoſſe, Bonaſa Scotica. *Idem* 199. *tab.* 22. f. 1. *Hiſt. d'Oys.* II. 242.
*Br. Zool.* 85. plate M. 3.

94. RED.

THE male weighs about nineteen ounces. The length is fifteen inches and a half: the breadth twenty-ſix. The bill is black: the noſtrils covered with red and black feathers: the irides hazel colored. At the baſe of the lower mandible, on each ſide, is a white ſpot: the throat is red. The plumage on the head and neck is of a light tawny red; each feather is marked with ſeveral tranſverſe bars of black. DESCRIP.

The back and ſcapular feathers are of a deeper red, and on the middle of each feather is a large black ſpot: the breaſt and belly are of a dull purpliſh brown, croſſed with numerous narrow duſky lines: the quil feathers are duſky: the tail conſiſts of ſixteen feathers of an equal length, all of them (except the four middlemoſt) are black, and the middle feathers are barred with red: the thighs are of a pale red, barred obſcurely with black, the legs and feet cloathed to the very claws with thick ſoft white feathers*; the claws are whitiſh, very broad and ſtrong.

* The feet in the figure given by *M. Briſſon* are engraven naked, or bare of feathers. The ſpecimen probably came to that gentleman in that condition: his deſcription in other reſpects is very accurate.

The

The female weighs only fifteen ounces. The colors in general are duller than thoſe of the male: the breaſt and belly are ſpotted with white: and the tips of ſome of the coverts of the wings are of the ſame color. The red naked part that lies above the eyes is leſs prominent than in the male, and the edges not ſo deeply fringed.

We believe this ſpecies to be peculiar to the *Britiſh* iſlands; not having met with any account of it, except in the writings of our countrymen Mr. *Ray* and *Willughby*, and in M. *Briſſon* under the name of *Bonaſa Scotica*; the ſame writer deſcribes it again by the title of *Attagen*, but his references are either to authors who have copied our naturaliſts, or to ſuch who mean quite another kind. Mr. *Ray* ſeems to think his bird, the other *Lagopus* of *Pliny**, or the *Francolino* of the modern *Italians:* but the account left us by *Pliny* ſeems too brief and uncertain to determine at this time what ſpecies he intended; and that the *Francolino* is not the ſame with our grous, is evident from the figure of it exhibited by our accurate friend Mr. *Edwards* †.

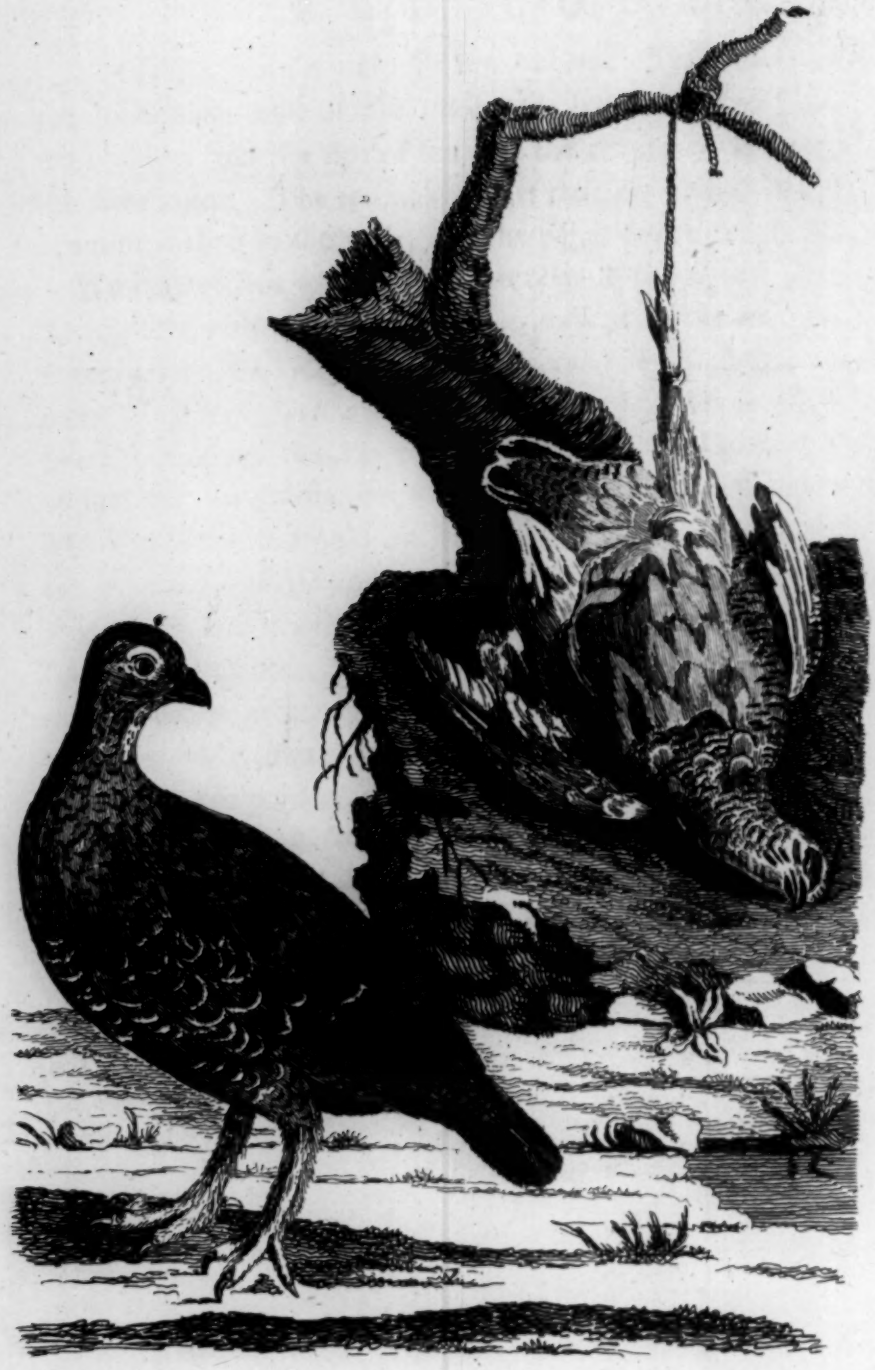
Theſe birds pair in the ſpring, and lay from ſix to ten eggs: the young brood or packs follow the hen the whole ſummer; in the winter they join in flocks of forty or fifty, and become remarkably ſhy and wild: they always keep on the tops of the hills, are ſcarce ever found on the ſides, and never deſcend into the vallies; their food is the mountain berries, and the tops of heath.

* Eſt et alia nomine eodem, a coturnicibus magnitudine tantum differens, croceo tinctu cibis gratiſſima. lib. x. c. 48.

† Plate 246.

La

Pl. XLIII.



F. GROUS . *N°.94*

PTARMIGAN. *N°.95*

La perdris blanche. *Belon av.* 259.
Lagopus. *Geſner av.* 576.
Perdrix alba ſeu Lagopus, Perdice alpeſtre. *Aldr. av.* II. 66.
Lagopus. *Plinii* lib. x. c. 48.
Tetrao Lagopus. *Lin. ſyſt.* 274.
Snoripa. *Faun. Suec. ſp.* 203.
La Gelinote blanche. *Briſſon av.* I. 216.
*Raii ſyn. av.* 55.
White Game, erroneouſly called the white Partridge. *Wil. orn.* 176.
The Ptarmigan. *Sib. Scot.* 16.
*Pl. Enl.* 129. *Hiſt. d'Oys.* II. 264.
*Norv.* Rype. *Mas Iſlandis*, Riupkarre, *Fæm.* Riupa *Brunnich* 199.
Schneehuhn. *Friſch.* I. 110.
Schneehun. *Kram.* 356.
*Br. Zool.* 86 plates M. 4. 5.
*Scopoli.* No. 118.

95. PTARMIGAN.

THIS bird is well deſcribed by Mr. *Willughby*, under the name of the white game. M. *Briſſon** joins it with the white partridge of Mr. *Edwards*, plate 72. I have received both ſpecies at the ſame time from *Norway*, and am convinced that they are not the ſame.

Theſe two birds differ greatly; the former being above twice the ſize of the *Ptarmigan*; and the color of its ſummer plumage quite different; that of Mr. *Edwards'* bird being marked with large ſpots of white, and dull orange; that of the *Ptarmigan* is of a pale brown or aſh-color, elegantly croſſed or motled with ſmall duſky ſpots, and minute bars: the head and neck with broad bars of black, ruſt-color, and white: the wings are white, but the ſhafts of the greater quil-feathers black: the belly white. In the male, the grey color predominates, except on the head and neck where there is a great mixture of red, with bars of white: but the whole plumage in this ſex is extremely elegant. The females and young

* *Tom.* I. *p.* 216.

birds

Descrip. birds have a great deal of ruſt-color in them: both agree in their winter dreſs, being intirely white, except as follows: in the male a black line occurs between the bill and the eyes; the ſhaft of the ſeven firſt quil feathers are black: the tail of the *Ptarmigan* conſiſts of ſixteen feathers; the two middle of which are aſh-colored, motled with black, and tipt with white; the two next black ſlightly marked with white at their ends, the reſt wholly black; the feathers incumbent on the tail white, and almoſt entirely cover it.

The length of theſe birds is near fifteen inches; the extent twenty three: the weight nineteen ounces.

*Ptarmigans* are found in theſe kingdoms only on the ſummits of the higheſt hills of the highlands of *Scotland* and of the *Hebrides*; and a few ſtill inhabit the lofty hills near *Keſwick* in *Cumberland*. They live amidſt the rocks perching on the grey ſtones, the general color of the ſtrata in thoſe exalted ſituations: they are very ſilly birds, ſo tame as to bear driving like poultry; and if provoked to riſe take very ſhort flights, taking a ſmall circuit like pigeons: they taſte ſo like a grous as to be ſcarcely diſtinguiſhed; like the grous they keep in ſmall packs; but never like thoſe birds take ſhelter in the heath; but beneath looſe ſtones.

Theſe birds are called by *Pliny*, *Lagopi*, their feet being cloathed with feathers to the claws, as the hare's are with fur: the nails are long, broad and hollow: the firſt circumſtance guards them from the rigor of the winter; the latter enables them to form a lodge under the ſnow, where they lie in heaps to protect them from the cold: the feet of the grous are cloathed in the ſame manner, but thoſe of the two firſt ſpecies here deſcribed, which perch upon trees, are

are naked, the legs only being feathered, not being in want of ſuch a protection.

In *Scotland* they inhabit from the hill of *Benlomond* to the naked mountain of *Scaroben* in *Cathneſs*, the iſle of *Arran*, many of the *Hebrides*, and the *Orknies*.

** With naked legs.

96. PARTRIDGE.

La Perdris griſe ou Gouache. *Belon av.* 257.
Perdix (Waldhun) *Geſner av.* 669.
Perdix minor ſive cinerea. *Aldr. av.* II. 66.
*Wil. orn.* 166.
*Raii ſyn. av.* 57.
Tetrao Perdrix. *Lin. ſyſt.* 276.
Rapphona. *Faun. Suec. ſp.* 205.
La Perdrix griſe. *Briſſon av.* I. 219. *Pl. enl.* 27. *Hiſt. d'Oys.* II. 401.
Starna. *Zinan* 30.
Agerhoene. *Br.* 201.
Rebhun. *Kram.* 357.
Rebhuhn. *Friſch*, I. 114.
*Br. Zool.* 86. plate M.
Serebitza *Scopoli.* No. 175.

DESCRIP. THE male partridge weighs near fifteen ounces; the female near two ounces leſs: the length to the end of the tail thirteen inches; the breadth twenty. The bill is whitiſh: the crown of the head is brown ſpotted with reddiſh white: behind each eye is a naked red ſkin. The chin, cheeks and forehead of a deep orange color, but in the females much paler than in the other ſex. The neck and breaſt are prettily marked with narrow undulated lines of aſh-color and black; and in the hind part of the neck is a ſtrong mixture of ruſt color: on the breaſt of the male is a broad mark in form of a horſe-ſhoe, of a deep orange hue; in the female it is leſs diſtinct.

Each feather on the back is finely marked with ſeveral ſemicircular lines of reddiſh brown and black: the ſcapulars with a narrow white line along their ſhafts, and with black and cinereous undulated lines on the webs; whoſe ſides are marked with a large ſpot of ruſt color. The greater quil-feathers are duſky, ſpotted on each web with pale red: it has eighteen feathers in the tail; the ſix outmoſt on each ſide are of a bright ruſt color tipt with white; the others marked tranſverſely with irregular lines of pale reddiſh brown and black: the legs are of a whitiſh caſt.

SALACIOUS. The nature of this bird is ſo well known, that it will be unneceſſary to detain the readers with any account of it: all writers agree, that its paſſion for venery exceeds that of any bird of the genus; ſhould the reader's curioſity be excited to ſee a more particular account, we beg leave to refer them to thoſe authors who have recorded this part of its natural hiſtory *.

The *Britiſh* name of this bird is *Kor-iâr*, a word now obſolete; that now in uſe is *Pertriſen*, borrowed from the *Normans*. *Sâr* is the generic name for the tribe.

97. QUAIL.

La Caille. *Belon av.* 263.
*Geſner av.* 334.
Coturnix Latinorum. *Aldr. av.* II. 69.
*Wil. orn.* 169.
*Raii ſyn. av.* 58.
La Caille. *Briſſon av.* I. 247.
*Hiſt. d'Oys.* II. 449.
Quaglia. *Zinan.* 36.
Tetrao coturnix. *Lin. ſyſt.* 278.
Wachtel. *Faun. Suec. ſp.* 206.
Vagtel. *Brunnich*, 202.
Wachtel. *Kram.* 357. *Friſch*, I. 117.
*Br. Zool.* 87. plate M. 6.
Perpelitza *Scopoli*, No. 176.

DESCRIP. THE length of the quail is ſeven inches and a half; the breadth fourteen: the bill is of a duſky color: the feathers of the

* *Pliny* lib. 10. c. 23. *Wil. orn.* 168. *Edw. preface to Gleanings, part 2.*

head

head are black, edged with ruſty brown: the crown of the head divided by a whitiſh yellow line, beginning at the bill and running along the hind part of the neck to the back: above each eye is another line of the ſame color: the chin and throat of a dirty white: the cheeks ſpotted with brown and white: the breaſt is of a pale yellowiſh red ſpotted with black: the ſcapular feathers and thoſe on the back are marked in their middles with a long pale yellow line, and on their ſides with ferruginous and black bars: the coverts of the wings are reddiſh brown, elegantly barred with paler lines bounded on each ſide with black. The exterior ſide of the firſt quil feathers is white, of the others duſky ſpotted with red: the tail conſiſts of twelve ſhort feathers barred with black and very pale browniſh red: the legs are of a pale hue.

Quails are found in moſt parts of *Great-Britain*; but not in any quantity: they are birds of paſſage: ſome entirely quitting our iſland, others ſhifting their quarters. A gentleman, to whom this work lies under great obligations for his frequent aſſiſtance, has aſſured us, that theſe birds migrate out of the neighbouring inland countries, into the hundreds of *Eſſex*, in *October*, and continue there all the winter: if froſt or ſnow drive them out of the ſtubble fields and marſhes, they retreat to the ſea-ſide; ſhelter themſelves among the weeds, and live upon what they can pick up from the *algæ*, &c. between high and low water mark. Our friend remarks, that the time of their appearance in *Eſſex*, coincides with that of their leaving the inland counties; the ſame obſervation has been made in *Hampſhire*.

Theſe birds are much leſs prolific than the partridge, ſeldom laying more than ſix or ſeven whitiſh eggs, marked with ragged ruſt colored ſpots: yet Mr. *Holland* of *Conway*, once found a neſt with

twelve eggs, eleven of which were hatched: they are very eaſily taken, and may be enticed any where by a call.

They are birds of great ſpirit; inſomuch that quail fighting among the *Athenians* was as great an entertainment as cock fighting is in this country: it is at this time a faſhionable diverſion in *China*, and large ſums are betted there on the event*. The bodies of theſe birds are extremely hot; the *Chineſe* on that account hold them in their hands in cold weather in order to warm themſelves†. *Chaude comme une Caille*, is a common proverb.

The antients never eat this bird, ſuppoſing them to have been unwholeſome, as they were ſaid to feed on *Hellebore*.

To the birds of this genus we ſhould add the whole tribe of domeſtic land fowl, ſuch as *Peacocks*, *Pheaſants*, &c. but theſe cannot clame even an *European* origin.

PEACOCKS. *India* gave us *Peacocks*; and we are aſſured‡ they are ſtill found in the wild ſtate, in vaſt flocks, in the iſlands of *Ceylon* and *Java*. So beautiful a bird could not long be permitted to be a ſtranger in the more diſtant parts; for ſo early as the days of *Solomon*‖, we find among the articles imported in his *Tarſhiſh* navies, *Apes* and *Peacocks*. A monarch ſo converſant in all branches of natural hiſtory, *who ſpoke of trees, from the cedar of Libanon, even unto the hyſſop that ſpringeth out of the wall: who ſpoke alſo of beaſts and of fowl*, would certainly not neglect furniſhing his officers with inſtructions for collecting every curioſity in the countries they voyaged to, which gave him a knowlege that diſtinguiſhed him from all

* *Bell's Travels.* I. 371. † *Oſbeck's Voyage.* I. 269.

‡ *Knox's hiſt. of Ceylon.* 28.

‖ *Kings*, I. 10.

the

the princes of his time. *Ælian* * relates, that they were brought into *Greece* from ſome barbarous country; and that they were held in ſuch high eſteem, that a male and female were valued at *Athens* at 1000 *drachmæ*, or 32*l.* 5*s.* 10*d.* Their next ſtep might be to *Samos*; where they were preſerved about the temple of *Juno*, being the birds ſacred to the goddeſs †: and *Gellius* in his *noctes Atticæ*, c. 16. commends the excellency of the *Samian* peacocks. It is therefore probable that they were brought here originally for the purpoſes of ſuperſtition, and afterwards cultivated for the uſes of luxury. We are alſo told, when *Alexander* was in *India* ‡, he found vaſt numbers of wild ones on the banks of the *Hyarotis*, and was ſo ſtruck with their beauty, as to appoint a ſevere puniſhment on any perſon that killed them.

Peacocks' creſts, in antient times, were among the ornaments of the Kings of *England*. *Ernald de Aclent* fined to King *John* in a hundred and forty palfries, with ſackbuts, lorains, gilt ſpurs and peacocks' creſts, ſuch as would be for his credit. *Maddox Antiq. Exch.* I. 273.

Our common *poultry* came originally from *Perſia* and *India*. *Ariſtophanes* || calls the cock περσικὸς ὄρνις, the *Perſian* bird; and tells us, it enjoyed that kingdom before *Darius* and *Megabyzus*: at this time we know that theſe birds are found in a ſtate of nature in the iſles of *Tinian* §, and others of the *Indian* ocean; and that in their wild condition their plumage is black and yellow, and their combs and wattles purple and yellow **. They were early introdu- POULTRY.

* *Ælian de nat. an.* lib. v. 21.

† *Athenæus. lib.* xiv. p. 655.

‡ *Q. Curtius.* lib. ix.

|| *Aves, lin.* 483.

§ *Dampier's voy.* I. 392. Lord *Anſon's voy.* 309.

** For this information we are indebted to governor *Loten*.

ced

ced into the weſtern parts of the world; and have been very long naturalized in this country; long before the arrival of the *Romans* in this iſland, *Cæſar* informing us, they were one of the forbidden foods of the *old Britains*. Theſe were in all probability imported here by the *Phœnicians*, who traded to *Britain*, about five hundred years before *Chriſt*. For all other domeſtic fowls, turkies, geeſe, and ducks excepted, we ſeem to be indebted to our conquerors, the *Romans*. The wild fowl were all our own from the period they could be ſuppoſed to have reached us after the great event of the flood.

PHEASANTS. *Pheaſants* were firſt brought into *Europe* from the banks of the *Phaſis*, a river of *Colchis*.

> Argiva primúm ſum tranſportata carina,
> Ante mihi notum nil, niſi *Phaſis* erat.
> *Martial.* lib. xiii. ep. 72.

GUINEA HENS. *Guinea hens*, the *Meleagrides* or *Gallinæ numidicæ* of the antients, came originally from *Africa**. We are much ſurprized how *Belon* and other learned ornithologiſts could poſſibly imagine them to have been the ſame with our *Turkies*; ſince the deſcriptions of the *meleagri* left us by *Athenæus* and other antient writers, agree ſo exactly with the *Guinea hen*, as to take away (as we ſhould imagine) all power of miſtake. *Athenæus* (after *Clytus Mileſius*, a diſciple of *Ariſtotle*) deſcribes their nature, form and colors: he tells us, "They want "natural affection towards their young; that their head is naked,

* *Boſman's hiſtory of Guinea.* 248. *Voyages de Marchais* III. 323. *Barbot's deſcr. Guinea. Churchill's coll. voy.* v. 29.

"and

"and that on the top of it is a hard round body like a peg or nail; "that from the cheeks hangs a red piece of fleſh like a beard; that "it has no wattles like the common poultry; that the feathers are "black ſpotted with white; that they have no ſpurs; and that "both ſexes are ſo like, as not to be diſtinguiſhed by the ſight *". *Varro* and *Pliny* † take notice of their ſpotted plumage, and the gibbous ſubſtance on their head: ſo that from theſe citations we find every character of the *Guinea hen*, but none that agrees with the *Turky*.

*Barbot* ‡ informs us that very few *turkies* are to be met with in *Guinea*; and thoſe only in the hands of the chiefs of the *European* forts; the negroes declining to breed any on account of their tenderneſs which ſufficiently proves them not to be natives of that climate. On the contrary the ſame writer ſays, that the *Guinea* hens, or as he calls them *Pintadas*, are found there in flocks of two or three hundred, that perch in trees, feed on worms and graſshoppers; that they are run down and taken by dogs, and that their fleſh is tender and ſweet, generally white, though ſometimes black.

He alſo remarks that neither the common poultry or ducks are natural to *Guinea*, any more than the *Turky*.

* Ἐστι δὲ ἄτοργον πρὸς τα ἔκγονα τὸ ὄρνεον, καὶ ὀλιγωρεῖ τῶν νεωτέρων, — ἐπ' αὐτῆς δὲ λόφον σάρκινον σκληρὸν, τροχγύλον ἐξέκονῖα τῆς κεφαλῆς ὥσπερ πάτταλον —— πρὸς δὲ ταῖς γνάθοις ἀπὸ τῆ σώματος ἀρξαμένην ἀνῖὶ πώγωνος μακραν σάρκα, καὶ ἐρυθροτέραν των ὡιδων την δὲ τοῖς ὄρνισιν ἐπί τῶ ῥύγχει γινομένην, ην ἔνιοι πώγωνα καλοῦσιν, ἐκ ἔχει, διο καὶ ταύτη κολοβόν ἐστι. —— σῶμα ἅπαν ποικίλον, μέλανος ὀνλος τε χρώματος ὅλε πλίλοις λευκοῖς —— σκέλη και ἄκεντρα —— παραπλήσιαι δὲ εἰσὶν αἱ θήλειαι τοῖς ἄῤῥεσιν· διὸ και δυσδιάκριτόν ἐστι τὸ των μελεαγρίδων γένος. Athenæus, 655.

† *Varro*. lib. 3. c. 9. *Pliny*. lib. 10. c. 26. ‡ *Barbot* 217.

Neither

Neither is that bird a native of *Aſia*: the firſt that were ſeen in *Perſia* were brought from *Venice* by ſome *Armenian* merchants*. They are alſo cultivated in *Ceylon*, but not found wild.

TURKY. In fact the *Turky* was unknown to the antient naturaliſts, and even to the *old world* before the diſcovery of *America*. It was a bird peculiar to the new continent, and is now the commoneſt wild fowl of the northern parts of that country. It was firſt ſeen in *France*, in the reign of *Francis* I. and in *England*, in that of *Henry* VIII. By the date of the reign of theſe monarchs, the firſt birds of this kind muſt have been brought from *Mexico*, whoſe conqueſt was completed, A. D. 1521. the ſhort lived colony of the *French* in *Florida* not being attempted before 1562; nor our more ſucceſsful one in *Virginia*, effected till 1585; when both thoſe monarchs were in their graves.

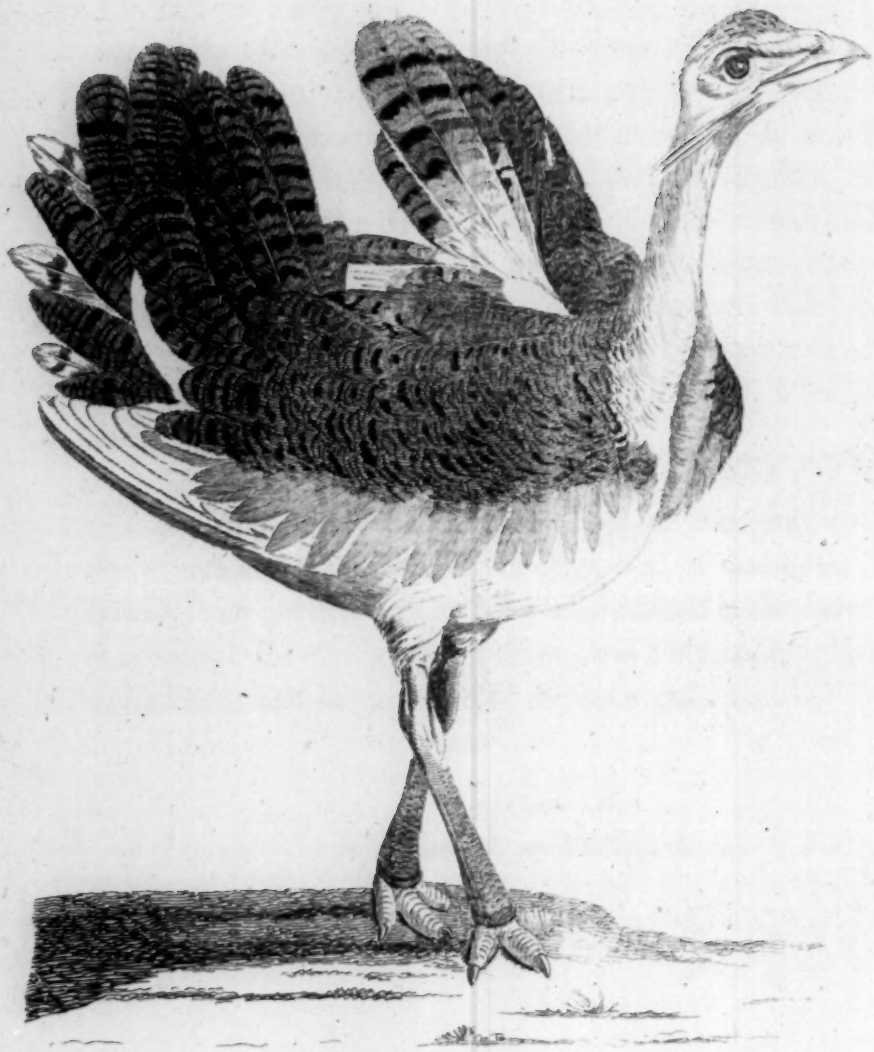
*Ælian*, indeed, mentions a bird found in *India*† that ſome writers have ſuſpected to be the *Turky*, but we conclude with *Geſner*, that it was either the *Peacock*, or ſome bird of that genus. On conſulting ſome gentlemen who have long reſided in the *Indies*, we find, that though the *Turky* is bred there, it is only conſidered as a domeſtic bird, and not a native of the country.

* *Tavernier.* 146.

† *Æliani hiſt. an.* lib. xvi. c. 2.

Strong

# BUSTARD.



Strong BILL, a little incurvated.
No back TOE.

XIII. BUSTARD.

Tetrax. *Athenæi*, lib. IX. 398.
L'Oſtarde. *Belon av.* 235.
Otis, vel Biſtarda. *Geſner av.* 484, 486.
Otis ſive Tarda. *Aldr. av.* II. 39.
*Wil. orn.* 178.
*Raii ſyn. av.* 58.
Guſtard. *Boethii*, 7. and *Sib. Scot.* 16.
*Edw. Tab.* 73, 74.

L'Outarde. *Briſſon av.* V. 18. *Hiſt. d'Oys.* II.
Otis tarda. *Lin. ſyſt.* 264.
*Faun. Suec. ſp.* 196.
Trap. *Kram.* 355.
Acker-Trappe. *Friſch*, I. 106. *Scopoli*, No. 160.
*Br. Zool.* 87. plate N. *Pl. Enl.* 245.

98. GREAT.

THE buſtard is the largeſt of the *Britiſh* land fowl; the male at a medium weighing twenty-five pounds; there are inſtances of ſome very old ones weighing twenty-ſeven. The breadth nine feet; the length near four. Beſides the ſize and difference of color, the male is diſtinguiſhed from the female by a tuft of feathers about five inches long on each ſide the lower mandible. Its head and neck are aſh colored: the back is barred tranſverſely with black and bright ruſt color: the greater quil feathers are black: the belly white: the tail is marked with broad red and black bars, and conſiſts of twenty feathers: the legs duſky.

DESCRIP.

The female is about half the ſize of the male: the crown of the head is of a deep orange, traverſed with black lines; the reſt of the head is brown. The lower part of the fore-ſide of the neck

FEMALE.

is aſh colored: in other reſpects it reſembles the male, only the colors of the back and wings are far more dull.

PLACE. Theſe birds inhabit moſt of the open countries of the ſouth and eaſt parts of this iſland, from *Dorſetſhire*, as far as the *Wolds* in *Yorkſhire* *. They are exceeding ſhy, and difficult to be ſhot; run very faſt, and when on the wing can fly, though ſlowly, many miles without reſting. It is ſaid that they take flight with difficulty, and are ſometimes run down with grehounds. They keep near their old haunts, ſeldom wandering above twenty or thirty miles. Their food is corn and other vegetables, and thoſe large earth worms that appear in great quantities on the *Downs*, before ſun-riſing in the ſummer. Theſe are replete with moiſture, anſwer the purpoſe of liquids, and enable them to live long without drinking on thoſe extenſive and dry tracts. Beſides this, nature hath given the males an admirable magazine for their ſecurity againſt drought, being a pouch †, whoſe entrance lies immediately under the tongue, and which is capable of holding near ſeven quarts; and this they probably fill with water, to ſupply the hen when ſitting, or the young before they can fly. Buſtards lay only two eggs, of the ſize of thoſe of a gooſe, of a pale olive brown, marked with ſpots of a darker color; they make no neſt, only ſcrape a hole in the ground. In autumn they are (in *Wiltſhire*) generally found in large turnep fields near the Downs, and in flocks of fifty or more.

* In Sir *Robert Sibbald*'s time they were found in the *Mers*, but I believe that they are now extinct in *Scotland*.

† The world is obliged to the late Dr. *Douglas* for this diſcovery; and to Mr. *Edwards* for communicating it.

The

The *French* Canne-patiere. *Wil. orn.* 179. *de Buffon*, II. 40. *Pl. Enl.* 10. 99. LESSER.
La petite outard. *Briſſon av.* V. 24. Otis Tetrax. *Lin. ſyſt.* 25. 264.

THERE have been three or four inſtances of this ſpecies being ſhot in *England*, but the ſpecimens I have ſeen have been all female. Whether they were accidental ſtragglers from the continent; or whether they breed here, and the male has eſcaped the ſportſman's notice, is not yet aſcertained.

This bird is about the ſize of a pheaſant. The male, which I have ſeen in *France*, varies much in the colors of the neck from the female, being black, marked tranſverſely above and below with a band of white. The crown of the head black and ferruginous. The back, ſcapulars, and coverts of the wings varied with black and ferruginous lines. The quil feathers black at their ends, white at their bottoms; the white predominating to the ſecondaries, which are quite white. The breaſt, belly, and thighs white. The middle feathers of the tail, tawny barred with black: the reſt white. Legs cinereous.

The neck of the female agrees in colors with the back: in other reſpects the marks pretty nearly agree.

They inhabit open countries; feed on grain, ſeeds, and inſects.

100. THICK-KNEED.

*Norfolk* Plover. *Br. Zool.* II. 378.
Un Oſtardeau, Oedicnemus. *Belon av.* 239.
Charadrius (Triel vel Griel). *Geſner av.* 256.
The Stone Curlew. *Wil. orn.* 306. *Raii ſyn. av.* 108.
Le grand Pluvier, Courly de terre. *Briſſon av.* V. 76. *Tab.* 7. *fig.* 1.
Charadrius oedicnemus. *Lin. ſyſt.* 255. *Br. Zool.* 127.
Kervari. *Haſſelquiſt Itin.* 210? *Engl. Ed.* 200.

DESCRIP. THE weight of this ſpecies is eighteen ounces. The length to the tail eighteen inches: the breadth thirty ſix. The head is remarkably round: the ſpace beneath the eyes is bare of feathers, and of a yellowiſh green: the irides yellow: the feathers of the head, neck, back, and ſcapulars, and coverts of the wings are black, edged deeply with pale reddiſh brown: the belly and thighs are of a pure white: the two firſt quil feathers are black, marked on the middle of each web with a large white ſpot.

The tail conſiſts of twelve feathers; the tips of the two outmoſt are black, beneath is a broad white bar, the remaining part barred with white and duſky brown: in the next feathers the white leſſens; in the middle it almoſt diſappears, changing it to a pale reddiſh brown, mottled with a darker: its mouth very wide: the legs are of a fine yellow: the toes very ſhort, bordered with a ſtrong membrane: the knees thick, as if ſwelled, like thoſe of a gouty man; from whence *Belon* gives it the name of *Oedicnemus* *.

This bird ſeems unknown in the weſtern parts of this kingdom; but is found in *Hampſhire*, *Norfolk*, and on *Lincoln heath*, where,

* From οιδεω, and κνήμη.

from

from a ſimilarity of colors to the curlew, it is called the *Stone Curlew*. It breeds in ſome places in rabbet boroughs; alſo among ſtones on the bare ground, laying two eggs of a copper color, ſpotted with a darker red. The young run ſoon after they are hatched. Theſe birds feed in the night on worms and caterpillars: they will alſo eat toads; and *Geſner* ſays they will catch mice, which is confirmed by *Haſſelquiſt*.

They make a moſt piercing ſhrill noiſe, which they begin in the evening; and are ſo loud, as to be heard near a mile in a ſtill night. They inhabit fallow lands and downs; affect dry places, never being ſeen near any waters. When they fly, they extend their legs ſtrait out behind: are very ſhy birds; run far before they take to wing; and often ſquat: are generally ſeen ſingle; and are eſteemed very delicate food.

In habit, make, and manners, theſe birds approach near to the *Buſtard*. We have therefore removed them into that genus, from that of *Plovers*.

They are migratory: appear in *England* about the middle of *April*, and retire in autumn.

ORDER

## ORDER IV. COLUMBINE.

XIV. PIGEON.

Soft ſtrait BILL.
NOSTRILS lodged in a tuberous naked ſkin.
TOES divided to their origin.

101. COMMON.

La Pigeon privè. *Belon av.* 313.
Columba vulgaris. *Geſner av.* 279. Livia. 307.
Columba domeſtica. *Aldr. av.* II. 225.
Common wild Dove, or Pigeon. *Wil. orn.* 180. and the Stock Dove, or Wood Pigeon *. 185.
*Raii ſyn. av.* 59, 62.
Golob. *Scopoli*, No. 177.
Le Pigeon domeſtique. *Briſſon av.* I. 68. *Hiſt. d'Oys.* II. 491.
Le Biſet. 498.
Columba Oenas. *Lin. ſyſt.* 279.
Skogs dufwa, Dufwa, Hemdufwa. *Faun. Suec. ſp.* 207.
Kirke-Due, Skov-Due. *Brunnich*, 203.
Feldtaube, Hauſtaube, Hohltaube. *Kram.* 358.
Blau-Taube, or Holtz-Taube. *Friſch*, I. 139.
*Br. Zool.* 88. plate 88.

THE tame pigeon, and all its beautifull varieties, derive their origin from one ſpecies, the *Stock Dove:* the *Engliſh* name implying its being the *ſtock* or *ſtem* from whence the other domeſtic kinds ſprung. Theſe birds, as *Varro*† obſerves, take their (Latin) name, *Columba*, from their voice or cooing; and had he known it,

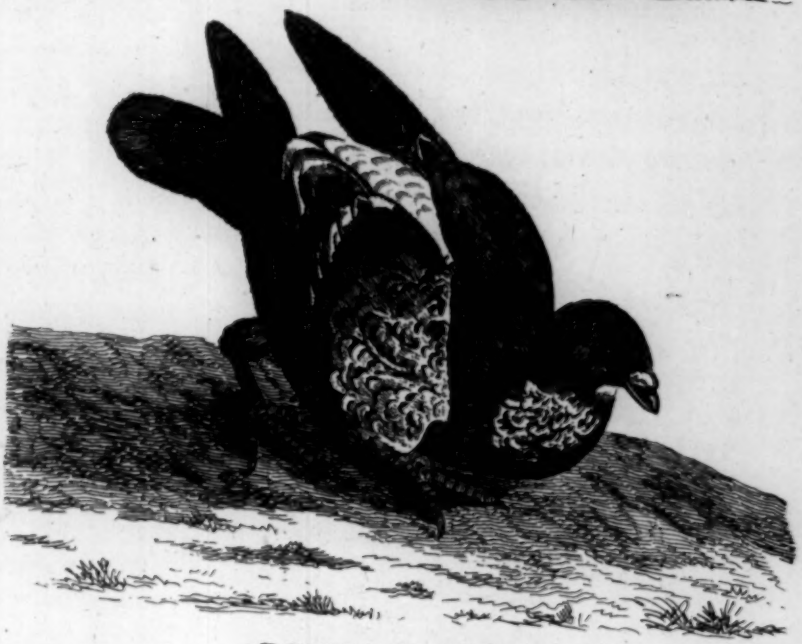
* Columba livia. *Aldr. av.* II. 234. et Oenas, ſeu vinago. 233.

† De *Ling. Lat.* lib. IV.

he

TURTLE

*N°* 103



ROCK PIGEON.

*N°* 101

he might have added the *Britiſh*, &c. for *K'lommen*, *Kylobman*, *Kulm* and *Kolm* ſignify the ſame bird. They were, and ſtill are in moſt parts of our iſland, in a ſtate of nature; but probably the *Romans* taught us the method of making them domeſtic, and conſtructing pigeon houſes. Its characters in the ſtate neareſt that of its origin, is a deep bluiſh aſh color; the breaſt daſhed with a fine changeable green and purple; the ſides of the neck with ſhining copper color; its wings marked with two black bars, one on the coverts of the wings, the other on the quil feathers. The back white, and the tail barred near the end with black. The weight fourteen ounces. DESCRIP.

In the wild ſtate it breeds in holes of rocks, and hollows of trees, for which reaſon ſome writers ſtile it *columba cavernalis* *, in oppoſition to the Ring Dove, which makes its neſt on the boughs of trees. Nature ever preſerves ſome agreement in the manners, characters, and colors of birds reclamed from their wild ſtate. This ſpecies of pigeon ſoon takes to build in artificial cavities, and from the temptation of a ready proviſion becomes eaſily domeſticated. The drakes of the tame duck, however they may vary in color, ever retain the mark of their origin from our *Engliſh* mallard, by the curled feathers of the tail: and the tame gooſe betrays its deſcent from the wild kind, by the invariable whiteneſs of its rump, which they always retain in both ſtates.

Multitudes of theſe birds are obſerved to migrate into the ſouth of *England:* and while the beech woods were ſuffered to cover large tracts of ground, they uſed to haunt them in *myriads*, reach-

* The *Columba ſaxatilis*, a ſmall ſort, that is frequent on moſt of our cliffs, is only a variety of the wild pigeon.

ing

ing in ſtrings of a mile in length, as they went out in the morning to feed. They viſit us the lateſt of any bird of paſſage, not appearing till *November*; and retire in the ſpring. I imagine that the ſummer haunts of theſe are in *Sweden*, for Mr. *Eckmark* makes their retreat thence coincide with their arrival here *. But many breed here, as I have obſerved, on the cliffs of the coaſt of *Wales*, and of the *Hebrides*.

VARIETIES. The varieties produced from the domeſtic pigeon are very numerous, and extremely elegant; theſe are diſtinguiſhed by names expreſſive of their ſeveral properties, ſuch as *Tumblers*, *Carriers*, *Jacobines*, *Croppers*, *Powters*, *Runts*, *Turbits*, *Owls*, *Nuns*, &c. †

CARRIER. The moſt celebrated of theſe is the *Carrier*, which from the ſuperior attachment that pigeon ſhews to its native place, is employed in many countries as the moſt expeditious courier: the letters are tied under its wing, it is let looſe, and in a very ſhort ſpace returns to the home it was brought from, with its advices ‡. This practice was much in vogue in the *Eaſt*, and at *Scanderoon*, till of late years,

* *Amœn. Acad.* IV. 593.

† Vide *Wil. orn. Moore's Columbarium*, and a treatiſe on domeſtic pigeons, publiſhed in 1765. The laſt illuſtrates the names of the birds, with ſeveral neat figures.

‡ This cuſtom was obſerved by that legendary traveller, Sir *John Maundevile*, knight, warrior and pilgrim; who, with the true ſpirit of religious chivalry, voyaged into the *Eaſt*, and penetrated as far as the borders of *China*, during the reigns of *Edward* II. and III.

" In that contree," ſays he, " and other contrees bezonde, thei han a cuſtom, whan thei ſchulle uſen werre, and whan men holden ſege abouten cytee or caſtelle, and thei with innen dur not ſenden out meſſagers with lettere, fro lord to lord, for to aſke ſokour, thei maken here letters and bynden hem to the nekke of

years *, uſed on the arrival of a ſhip, to give the merchants at *Aleppo* a more expeditious notice than could be done by any other means. In our own country, theſe aerial meſſengers have been employed for a very ſingular purpoſe, being let looſe at *Tyburn* at the moment the fatal cart is drawn away, to notify to diſtant friends, the departure of the unhappy criminal.

In the *Eaſt*, the uſe of theſe birds ſeems to have been improved greatly, by having, if we may uſe the expreſſion, relays of them ready to ſpread intelligence to all parts of the country. Thus the governor of *Damiata* circulated the news of the death of *Orrilo*:

Toſto che'l Caſtellan di *Damiata*
Certificoſſi, ch'era morto *Orrilo*,
La *Colomba* laſciò, ch'avea legata
Sotto l'ala la lettera col filo.
Quelle andò al *Cairo*, ed indi fu laſciata
Un' altra altrove, come quivi e ſtilo:
Si, che in pochiſſime ore andò l'avviſo
Per tutto *Egitto*, ch'era *Orrilo* ucciſo †.

of a *Colver*, and leten the *Colver* flee; and the *Colveren* ben ſo taughte, that thei fleen with tho letters to the verry place, that men wolde ſend hem to. For the *Colveres* ben noryſſcht in tho places, where thei ben ſent to; and thei ſenden hem thus, for to beren here letters. And the *Colveres* retournen azen, where as thei ben noriſſcht and ſo they don comounly." The voiage and travaile of Sir *J. Maundevile*, knight, ed. 1727.

* Dr. *Ruſſel* informs us, that the practice is left off. *Hiſt. Aleppo*, 66.

† 'As ſoon as the commandant of *Damiata* heard that *Orrilo* was dead, he let 'looſe a pigeon, under whoſe wing he had tied a letter; this fled to *Cairo*, from 'whence a ſecond was diſpatched to another place, as is uſual; ſo that in a very 'few hours, all *Egypt* was acquainted with the death of *Orrilo*.' *Arioſto*, canto 15.

But the ſimple uſe of them was known in very early times: *Anacreon* tells us, he conveyed his billet-doux, to his beautifull *Bathyllus*, by a dove.

Εγὼ δ' Ἀνακρέοντι
Διάκονῶ τοσαῦτα·
Και νῦν οἵας ἐκείνε
Ἐπιστολας κομίζω *.

I am now *Anacreon*'s ſlave,
And to me entruſted have
All the o'erflowings of his heart
To *Bathyllus* to impart;
Each ſoft line, with nimble wing,
To the lovely boy I bring.

*Tauroſthenes* alſo, by means of a pigeon he had decked with purple, ſent advice to his father, who lived in the iſle of *Ægina*, of his victory in the *Olympic* games, on the very day he had obtained it †. And, at the ſiege of *Modena*, *Hirtius* without, and *Brutus* within the walls, kept, by the help of pigeons, a conſtant correſpondence; baffling every ſtratagem of the beſieger *Antony* ‡, to intercept their couriers. In the times of the *Cruſades*, there are many more inſtances of theſe birds of peace being employed in the ſervice of war: *Joinville* relates one during the cruſade of *Saint Louis* ‖; and *Taſſo* another, during the ſiege of *Jeruſalem* §.

* *Anacreon, ode* 9. εἰς περισεράν.

† *Ælian var. hiſt.* lib. IX. 2. *Pliny, lib.* X. *c.* 24. ſays, that ſwallows have been made uſe of for the ſame purpoſe.

‡ *Pliny*, lib. X. c. 37. *Exclames*, Quid vallum et vigil obſidio atque etiam retia amne pretenta profuere *Antonio, per cœlum eunte nuncio?*

‖ *Joinville*, 638. *app.* 35. § *Taſſo*, Book XVIII.

The

The nature of pigeons is to be gregarious; to lay only two eggs; to breed many times in the year *; to bill in their courtſhip; for the male and female to ſit by turns, and alſo to feed their young; to caſt their proviſion out of their craw into the young ones' mouths; to drink, not like other birds by ſipping, but by continual draughts like quadrupeds; and to have notes mournful, or plaintive.

Le Ramier. *Belon av.* 307.
Phaſſa. *Belon obſ.* 13.
Palumbus. *Geſner av.* 310.
Palumbus major ſive torquatus. *Aldr. av.* II. 227.
Colombaccio. *Olina*, 54.
Ring-dove, Queeſt, or Cuſhat. *Will. orn.* 185.
Le Pigeon Ramier. *Briſſon av.* I. 89. *Hiſt. d'Oys.* II. 531.
Griunik. *Scopoli*, No. 178. *Raii ſyn. av.* 62.
Columba palumbus. *Lin. ſyſt. ſp.* 282.
Ringdufwa, Siutut. *Faun. Suec. ſp.* 208.
Wildtaube, Ringltaube. *Kram.* 359.
Ringel-Taube. *Friſch*, I. 138.
*Dan.* Ringel-due. *Bornholmis*, Skude. *Brunnich*, 204.
*Br. Zool.* 89. plate O.

102. RING.

THIS ſpecies forms its neſt of a few dry ſticks in the boughs of trees: attempts have been made to domeſticate them, by hatching their eggs under the common pigeon in dove houſes; but as ſoon as they could fly, they always took to their proper haunts. In the beginning of the winter they aſſemble in great flocks, and leave off cooing; which they begin in *March*, when they pair. The ring dove is the largeſt pigeon we have; and may be at once diſtinguiſhed from all others by the ſize. Its weight is about twenty ounces: its length eighteen inches; its breadth thirty.

DESCRIP.

* So quick is their produce, that the author of the *Oeconomy of nature* obſerves, that in the ſpace of four years, 14,760 may come from a ſingle pair. *Stillingfleet's tracts*, 75.

The head, back, and coverts of the wings are of a bluiſh aſh color: the lower ſide of the neck and the breaſt are of a purpliſh red, daſhed with aſh color: on the hind part of the neck is a ſemicircular line of white; above and beneath that the feathers are gloſſy, and of changeable colors as oppoſed to the light. The belly is of a dirty white: the greater quil feathers are duſky; the reſt aſh colored: underneath the baſtard wing is a white ſtroke pointing downwards.

103. Turtle.

La Turtrelle. *Belon av.* 309.
Turtur. *Geſner av.* 316.
Turtur. *Aldr. av.* II. 235.
Tortora. *Olina*, 34.
The Turtle-dove. *Wil. orn.* 183.
*Raii ſyn. av.* 61.
Wilde Turtel taube. *Kram.* 359.
Turtel-Taube. *Friſch*, I. 140.
Le Tourterelle. *Briſſon av.* I. 92.
*Scopoli*, No. 181.
*Br. Zool.* 89. plate O. 1.
*Hiſt. d'Oys.* II. 545.

THIS ſpecies is found in *Buckinghamſhire*, *Glouceſterſhire*, *Shropſhire*, and in the *Weſt* of *England*. They are very ſhy and retired birds, breeding in thick woods, generally of oak: we believe that they reſide in *Buckinghamſhire* during the breeding ſeaſon, migrating into the other countries in autumn.

Descrip. The length is twelve inches and a half; its breadth twenty-one: the weight four ounces. The irides are of a fine yellow: a beautifull crimſon circle encompaſſes the eye lids. The chin and forehead are whitiſh: the top of the head aſh colored mixed with olive: on each ſide of the neck is a ſpot of black feathers prettily tipt with white: the back aſh colored, bordered with olive brown: the ſcapulars and coverts of a reddiſh brown ſpotted with black: the quil

quil feathers of a duſky brown, the tips and outward edges of a yellowiſh brown: the breaſt of a light purpliſh red, having the verge of each feather yellow: the belly white: the ſides and inner coverts of the wings bluiſh. The tail is three inches and a half long; the two middlemoſt feathers are of a duſky brown; the others black, with white tips: the end and exterior ſide of the outmoſt feathers wholly white.

ORDER

## ORDER V. PASSERINE.

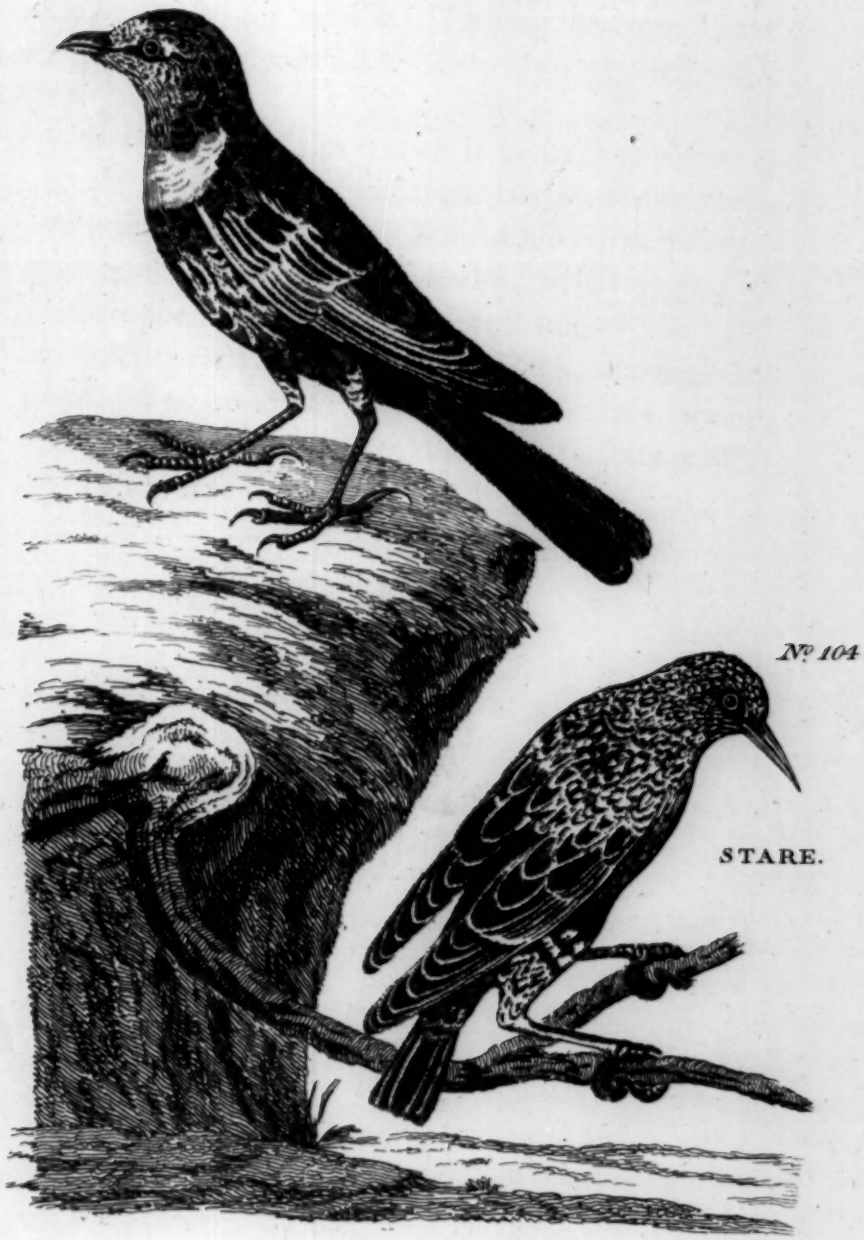
XV. STARE. Strait BILL; depreſſed: the NOSTRILS ſurrounded with a prominent rim.

104. STARE.
L'Eſtourneau. *Belon av.* 321.
Sturnus. *Geſner av.* 746.
*Aldr. av.* II. 284.
Stare, or Starling. *Wil. orn.* 196.
*Raii ſyn. av.* 67.
L'Etourneau. *Briſſon av.* II. 439.
*Hiſt. d'Oys.* III. 176.
Sanſonet. *Pl. Enl.* 75.
Starl. *Scopoli*, No. 189.
Storno. *Zinan.* 69.
*Olina*, 18.
Sturnus vulgaris. *Lin. ſyſt.* 290.
Stare. *Faun. Succ. ſp.* 213.
*Haſſelquiſt, Itin.* 284.
*Danis & Norvegis*, Stær. *Br.* 229.
Staar. *Friſch*, II. 217.
Starl. *Kram.* 362.
*Br. Zool.* 93. plate P. 2. f. 1.

THE Stare breeds in hollow trees, eaves of houſes, towers, ruins, cliffs, and often in high rocks over the ſea, ſuch as thoſe of the *Iſle of Wight*. It lays four or five eggs, of a pale greeniſh aſh color; and makes its neſt of ſtraw, ſmall fibres of roots, and the like. In winter, ſtares aſſemble in vaſt flocks: they collect in myriads in the fens of *Lincolnſhire*, and do great damage to the fen men, by rooſting on the reeds, and breaking them down by their weight; for reeds are the thatch of the country, and are harveſted with great care.

Theſe

RING OUZEL.



N° 104

STARE.

Theſe birds feed on worms, and inſects; and it is ſaid that they will get into pigeon houſes, for the ſake of ſucking the eggs. Their fleſh is ſo bitter, as to be ſcarce eatable. They are very docil, and may be taught to ſpeak.

The weight of the male of this ſpecies is about three ounces; that of the female rather leſs. The length is eight inches three quarters: the breadth fourteen inches. Bill, in old birds, yellow. The whole plumage is black, very reſplendent with changeable blue, purple, and copper: each feather marked with a pale yellow ſpot. The leſſer coverts are edged with yellow, and ſlightly gloſſed with green. The quil feathers and tail duſky: the former edged with yellow on the exterior ſide; the laſt with dirty white. The legs of a reddiſh brown.

XVI. THRUSH.

Strait BILL, a little bending at the point, with a ſmall notch near the end of the upper mandible.

Outmoſt TOE adhering as far as the firſt joint to the middle toe.

105. Missel.

La Grive ou Siſerre. *Belon av.* 324.
Turdus viſcivorus. *Geſner av.* 759. *Aldr. av.* II. 273.
Tordo. *Olina*, 25.
Miſſel-bird, or Shrite. *Wil. orn.* 187. *Raii ſyn. av.* 64.
Miſſeltoe-thruſh, or Shreitch. *Charlton ex.* 89.
Turdus viſcivorus. *Lin. ſyſt.* 291.
Tordo viſcada, Zicchio. *Zinan.* 39.
La Draine. *Hiſt. d'Oys.* III. 295.
La groſſe grive, Turdus major. *Briſſon av.* II. 200. *Scopoli*, No. 193.
Biork-Traſt. *Faun. Suec. ſp.* 216.
Dobbelt-Kramsfugl. *Brunnich*, 231.
Zariker, Miſtler, Zerrer. *Kram.* 361.
Miſtel-Droſſel, or Schnarre. *Friſch*, I. 25. *Br. Zool.* 90. plate P. f. 1.

THIS is the largeſt of the genus, and weighs near five ounces. Its length is eleven inches: its breadth ſixteen and a half. The bill is ſhorter and thicker than that of other thruſhes; duſky, except the baſe of the lower mandible, which is yellow. The *irides* hazel.

Head, back, and leſſer coverts of the wings are of a deep olive brown. The lower part of the back tinged with yellow. The loweſt order of leſſer coverts, and the great coverts brown: the firſt tipt with white; the laſt both tipt and edged with the ſame color. The quil feathers, and ſecondaries duſky; but the lower part of the inner webs white. The inner coverts of the wings *white*. Tail brown; the three outmoſt feathers tipt with white.

Cheeks

Cheeks and throat mottled with brown and white: breaſt and belly whitiſh yellow, marked with large ſpots of black: the legs yellow. Theſe birds build their neſts in buſhes, or on the ſide of ſome tree, generally an aſh, and lay four or five eggs: their note of anger or fear is very harſh, between a chatter and ſkreek; from whence ſome of its *Engliſh* names; its ſong though is very fine, which it begins, ſitting on the ſummit of a high tree, very early in the ſpring, often with the new year, in blowing ſhowery weather, which makes the inhabitants of *Hampſhire* to call it the *Storm-cock*. It feeds on inſects, holly and miſſeltoe berries, which are the food of all the thruſh kind: in ſevere ſnowy weather, when there is a failure of their uſual diet, they are obſerved to ſcratch out of the banks of hedges, the root of *Arum*, or the cuckoo pint: this is remarkably warm and pungent, and a proviſion ſuitable to the ſeaſon.

This bird migrates into *Burgundy* in the months of *October* and *November*: in *Great-Britain*, continues the whole year. The *Welſh* call this bird *Pen y llwyn*, or the maſter of the coppice, as it will drive all the leſſer ſpecies of thruſhes from it. The antients believed that the *miſſeltoe* (the baſis of bird-lime) could not be propagated but by the berries that had paſt through the body of this bird; and on that is founded the proverb of *Turdus malum ſibi cacat.*

It may be obſerved, that this is the largeſt bird, *Britiſh or foreign* (within our knowledge) that ſings or has any melody in its note: the notes of all ſuperior being either ſcreaming, croaking, chattering, &c. the pigeon kind excepted, whoſe ſlow plaintive continued monotone has ſomething ſweetly ſoothing in it. *Thompſon* (the naturaliſt's poet) in the concert he has formed among the fea-

thered tribe, allows the imperfection of voice in the larger birds, yet introduces them as uſeful as the baſe in chorus, notwithſtanding it is unpleaſing by itſelf.

The jay, the rook, the daw,
And each harſh pipe (diſcordant heard alone)
Aid the full concert: while the ſtock-dove breaths
A melancholy murmur thro' the whole *.

106. Fieldfare.

La Litorne. *Belon av.* 328.
Turdus pilaris. *Geſner av.* 753. *Aldr. av.* II. 274. *Wil. orn.* 188. *Raii ſyn. av.* 64.
La Litorne, ou Tourdelle. *Briſſon av.* II. 214. *Hiſt. d'Oys.* III. 301. *Lin. ſyſt.* 291.
Kramsfogel, ſnoſkata. *Faun. Suec.* No. 215.
Brinauka. *Scopoli*, No. 194.
*Dan.* Dobbelt Kramsfugl. *Cimbrit.* Snarrer. *Norvegis*, Graae Troſt, Field-Troſt, Nordenvinds Pibe, *Bornholmis*, Simmeren. *Br.* 232.
Kranabets vogel, Kranabeter. *Kram.* 361.
Wacholder-Droſſel, Juniper Thruſh, or Ziemer. *Friſch*, I. 26. *Br. Zool.* 90. plate P. 2. f. 1.

THIS bird paſſes the ſummer in the northern parts of *Europe*; alſo in lower *Auſtria* †. It breeds in the largeſt trees ‡; feeds on berries of all kinds, and is very fond of thoſe of the juniper. Fieldfares viſit our iſlands in great flocks about *Michaelmas*, and leave us the latter end of *February*, or the beginning of *March*. We ſuſpect that the birds that migrate here, come from *Norway*, &c. forced by the exceſſive rigor of the ſeaſon in thoſe cold regi-

* *Seaſons. Spring.* l. 606.

† *Kramer elench.* 361.

‡ *Faun. Suec. ſp.* 78.

ons;

ons; as we find that they winter as well as breed in *Pruſſia*, *Auſtria**, and the moderate climates.

Theſe birds and the *Redwings* were the *Turdi* of the *Romans*, which they fattened with crums of figs and bread mixed together. *Varro* informs us that they were birds of paſſage, coming in autumn, and departing in the ſpring. They muſt have been taken in great numbers, for they were kept by thouſands together in their fattening aviaries †. They do not arrive in *France* till the beginning of *December*.

Theſe birds weigh generally about four ounces; their length is ten inches, their breadth ſeventeen. The head is aſh-colored inclining to olive, and ſpotted with black; the back and greater coverts of the wings of a fine deep cheſnut; the rump aſh-colored: the tail is black: the lower parts of the two middlemoſt feathers, and the interior upper ſides of the outmoſt feathers excepted; the firſt being aſh-colored, the latter white. The legs are black; the talons very ſtrong. DESCRIP.

* *Klein hiſt. av.* 178.

† *Varro*, lib. III. c. 5.

107. THROSTLE.

La petite Grive. *Belon av.* 226.
Turdus minor alter. *Geſner av.* 762. *Aldr. av.* II. 275.
Storno. *Olina*, 18.
Mavis, Throſtle, or Song Thruſh. *Wil. orn.* 188. *Raii ſyn. av.* 64.
La petite Grive, Turdus minor. *Briſſon av.* II. 205. *Hiſt. d'Oys.* III. 280.
Turdus muſicus. *Lin. ſyſt.* 292. *Faun. Suec. ſp.* 217.
Turdus in altiſſimis. *Klein ſtem. av. tab.* 13.
Weindroſchl, Weiſſdroſchl, Sommerdroſchl. *Kram.* 361.
Sing-Droſſel, or Weiſſ-droſſel. *Friſch*, I. 27.
*Cimbris* & *Bornholmis*, Viindroſſel. *Norvegis*, Tale Traſt. *Br.* 236. *Br. Zool.* 91. plate P. f. 2.
Draſich. *Scopoli*, No. 195.

DESCRIP. THE weight of this ſpecies is three ounces: the length nine inches: the breadth thirteen and a half. In colors it ſo nearly reſembles the miſſel thruſh, that no other remark need be added, but that it is leſſer, and that the inner coverts of the wings are yellow.

The throſtle is the fineſt of our ſinging birds, not only for the ſweetneſs and variety of its notes, but for long continuance of its harmony; for it obliges us with its ſong for near three parts of the year. Like the miſſel bird, it delivers its muſic from the top of ſome high tree; but to form its neſt deſcends to ſome low buſh or thicket: the neſt is made of earth, moſs, and ſtraws, and the inſide is curiouſly plaiſtered with clay. It lays five or ſix eggs, of a pale bluiſh green, marked with duſky ſpots.

In *France* theſe birds are migratory: in *Burgundy*, they appear juſt before vintage, in order to feed on the ripe grapes, are therefore called there *la Grive de vigne*.

Le Mauvis. *Belon av.* 327.
Turdus minor. *Geſner av.* 761.
T. Illas ſeu Tylas. *Aldr. av.* II. 275.
Redwing, Swinepipe, or Wind Thruſh. *Wil. orn.* 189.
*Raii ſyn. av.* 54.
Le Mauvis. *Briſſon av.* II. 208. *tab.* 20. *fig.* 1. *Hiſt. d'Oys.* III. 309.
*Scopoli*, No. 196.
*Pl. Enl.* 51.
Turdus iliacus. *Lin. ſyſt.* 292.
Klera, Kladra, Tall-Traſt. *Faun. Suec. ſp.* 218.
Rothdroſchl, Walddroſchl, Winterdroſchl. *Kram.* 361.
Wein-Droſſel. Roth-Droſſel. *Friſch*, I. 28.
*Br. Zool.* 91. plate P. f. 2.

108. REDWING.

THESE birds appear in *Great-Britain* a few days before the fieldfare; they come in vaſt flocks, and from the ſame countries as the latter. With us they have only a diſagreeable piping note; but in *Sweden* during the ſpring ſing very finely, perching on the top of ſome tree among the foreſts of maples. They build their neſts in hedges, and lay ſix bluiſh green eggs ſpotted with black *.

DESCRIP. They have a very near reſemblance to the throſtle; but are leſs, only weighing two ounces and a quarter: their colors are much the ſame; only the ſides under the wings and the inner coverts in this are of a reddiſh orange; in the throſtle yellow: above each eye is a line of yellowiſh white, beginning at the bill and paſſing towards the hind part of the head. The vent feathers are white.

Beſides theſe three ſorts of throſtles, the author of the *epitome of the art of huſbandry* †, mentions a fourth kind under the name of the *heath throſtle*, which he commends as far ſuperior to the others

* *Faun. Suec. ſp.* 218.

† *By* J. B. *gent. third edit.* 1685.

in

in its ſong: he ſays it is the leſt of any, and may be known by its dark breaſt; that it builds its neſt by ſome heath-ſide, is very ſcarce, and will ſing nine months in the year.

109. BLACKBIRD.

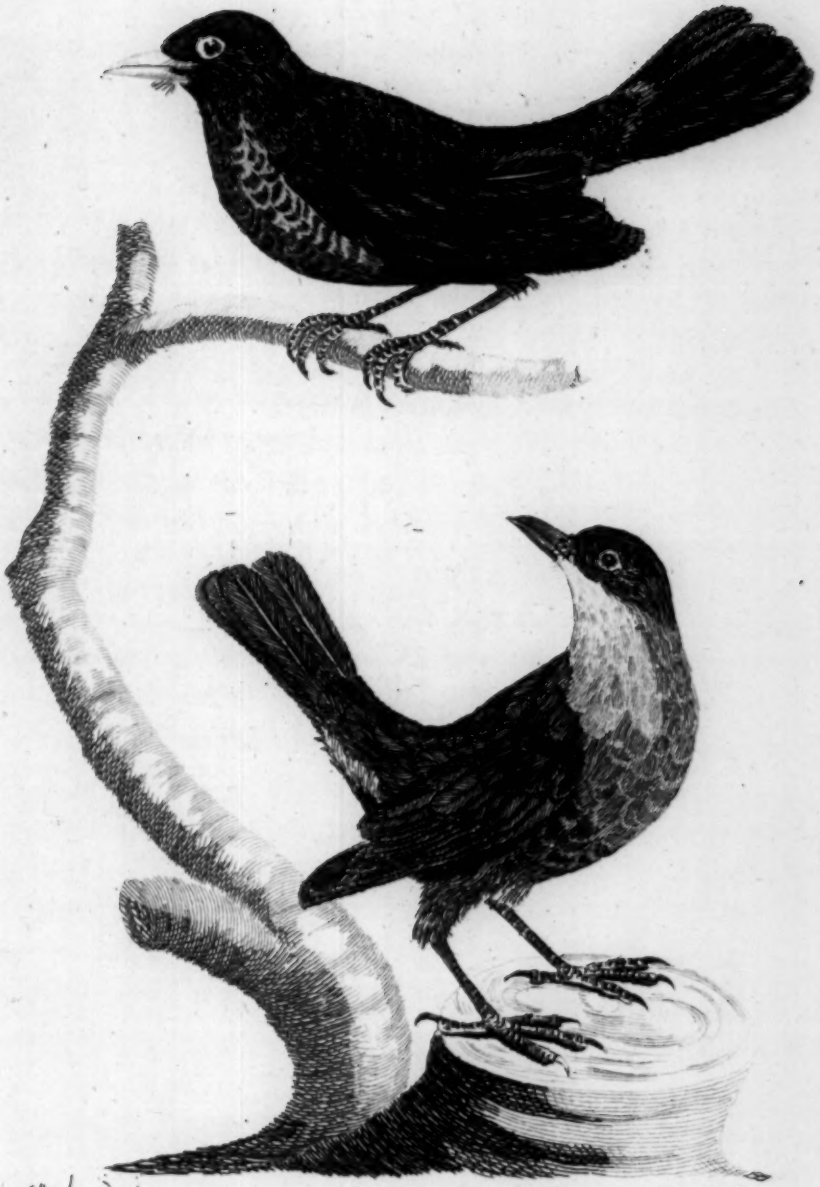
Le Merle noir. *Belon av.* 320.
Merula. *Geſner av.* 602.
*Aldr. av.* II. 276.
Merlo. *Zinan.* 39. *Olina*, 29.
*Wil. orn.* 190.
*Raii ſyn. av.* 65.
La Merle. *Briſſon av.* II. 227.
*Hiſt. d'Oys.* III. 330.
*Pl. Enl.* 2.
Turdus merula. *Lin. ſyſt.* 295.
Kohl-Traſt. *Faun. Suec. ſp.* 220.
*Dan. & Norvegis* Solſort. *Br.* 234.
Amſel, Amarl. *Kram.* 360.
Schwartze Amſel. *Friſch*, I. 29.
*Br. Zool.* 92.
Koſs. *Scopoli*, No. 197.

THIS bird is of a very retired and ſolitary nature: frequents hedges and thickets, in which it builds earlier than any other bird: the neſt is formed of moſs, dead graſs, fibres, &c. lined or plaiſtered with clay, and that again covered with hay or ſmall ſtraw. It lays four or five eggs of a bluiſh green color, marked with irregular duſky ſpots. The note of the male is extremely fine, but too loud for any place except the woods: it begins to ſing early in the ſpring, continues its muſic part of the ſummer, deſiſts in the moulting ſeaſon; but reſumes it for ſome time in *September*, and the firſt winter months.

DESCRIP. The color of the male, when it has attained its full age, is of a fine deep black, and the bill of a bright yellow: the edges of the eye-lids yellow. When young the bill is duſky, and the plumage of a ruſty black, ſo that they are not to be diſtinguiſhed from the females; but at the age of one year they attain their proper color.

Le

M. & F. BLACKBIRD.



M. Griffiths del.

Le Merle ou Collier. *Belon av.* 318.
Merula torquata. *Geſner av.* 607.
Merlo alpeſtre. *Aldr. av.* II. 282.
*Wil. orn.* 194. Rock or Mountain-Ouzel, 195.
Mwyalchen y graig. *Camden Brit.* 795.
Le Merle a plaſtron blanc. *Hiſt. d'Oys.* III. 340.
*Raii ſyn. av.* 65.
*Morton Northampt.* 425.
Le Merle a Collier. *Briſſon av.* II. 235.
Turdus torquatus. *Lin. ſyſt.* 296.
*Faun. Suec. ſp.* 221. *Scopoli*, No. 198.
*Dan.* Ringdroſſel. *Norvegis* Ring Troſt. *Br.* 237.
Ringlamſel. *Kram.* 360.
Ringel-Amſel. *Friſch*, I. 30.
*Br. Zool.* 92. plate P. 1. f. 1.

110. RING-OUZEL.

DESCRIP. THESE birds are ſuperior in ſize to the black bird: their length is eleven inches; their breadth ſeventeen. The bill in ſome is wholly black, in others the upper half is yellow: on each ſide the mouth are a few briſtles: the head and whole upper part of the body are duſky, edged with pale brown: the quil-feathers, and the tail are black. The coverts of the wings, the upper part of the breaſt, and the belly are duſky, ſlightly edged with aſh-color. The middle of the breaſt is adorned with a white creſcent, the horns of which point to the hind part of the neck. In ſome birds this is of a pure white, in others of a dirty hue. In the females and in young birds this mark is wanting, which gave occaſion to ſome naturaliſts to form two ſpecies of them.

The *Ring-Ouzel* inhabits the *Highland* hills, the north of *England*, and the mountains of *Wales*. They are alſo found to breed in *Dartmoor*, in *Devonſhire*, in banks on the ſides of ſtreams. I have ſeen them in the ſame ſituation in *Wales*, very clamorous when diſturbed.

They are obſerved by the Rev. Mr. *White*, of *Selborn*, near *Alton*,

*Alton, Hants*, to viſit his neighbourhood regularly twice a year, in flocks of twenty or thirty, about the middle of *April*, and again about *Michaelmas*. They make it only a reſting place in their way to ſome other country; in their ſpring migration they only ſtay a week, in their autumnal a fortnight. They feed there on haws, and for want of them on yew berries. On diſſection, the females were found full of the ſmall rudiments of eggs, which prove them to be later breeders than any others of this genus, which generally have fledged young about that time. The places of their retreat is not known: thoſe that breed in *Wales* and *Scotland* never quitting thoſe countries. In the laſt they breed in the hills, but deſcend to the lower parts to feed on the berries of the mountain aſh.

They migrate in *France* at the latter ſeaſon: and appear in ſmall flocks about *Montbard*, in *Burgundy*, in the beginning of *October*, but ſeldom ſtay above two or three weeks. Notwithſtanding this, they are ſaid, to breed in *Sologne* and the foreſt of *Orleans*.

III. WATER-OUZEL.

Merula aquatica. *Geſner av.* 608.
Lerlichirollo. *Aldr. av.* III. 186.
Water-craw. *Turner.*
The Water-Ouzel, or Water-Crake. *Wil. orn.* 149.
*Raii ſyn. av.* 66.
Sturnus cinclus. *Lin. ſyſt.* 290.
Watnſtare. *Faun. Suec. ſp.* 214.
Povodni Koſs. *Scopoli*, No. 223.
Le Merle d'eau. *Briſſon av.* v. 252.
Merlo aquatico. *Zinan.* 109.
*Norvegis*, Foſſe Fald, Foſſe Kald, Quærn Kald, Stroem-Stær, Bække Fugl. *Brunnich.* 230.
Waſſer-amſel, Bach-amſel. *Kram.* 374.
*Br. Zool.* 92. plate. P. 1. f. 2.

THIS bird frequents ſmall brooks, particularly thoſe with ſteep banks, or that run through a rocky country. It is of a very retired nature, and never ſeen but ſingle, or with its mate. It breeds in

in holes in the banks, and lays five white eggs adorned with a fine bluſh of red. It feeds on inſects and ſmall fiſh; and as Mr. *Willughby* obſerves, though not web-footed, will dart itſelf after them quite under water. The neſt is conſtructed in a curious manner, of hay and fibres of roots, and lined with dead oak leaves, having a portico, or grand entrance made with green moſs. NEST.

Its weight is two ounces and a half: the length ſeven inches one quarter: the breadth eleven: the bill is narrow, and compreſſed ſideways: the eyelids are white: the head, cheeks, and hind part of the neck are duſky, mixed with ruſt color: the back, coverts of the wings, and of the tail alſo duſky, edged with bluiſh aſh color: the throat and breaſt white: the belly ferruginous, vent feathers a deep aſh color: the legs are of a pale blue before, black behind: the tail ſhort and black, which it often flirts up, as it is ſitting. DESCRIP.

Theſe are all the birds of this genus that can clame a place in this work. The roſe colored ouzel, *Wil. orn.* 194. *Edw.* 20. a foreign bird, has been ſhot at *Norwood* near *London*; for its hiſtory we refer our readers to the appendix.

XVII. CHATTERER.

BILL ſtrait, a little convex above, and bending towards the point. Near the end of the lower mandible a ſmall notch on each ſide.
NOSTRILS hid in briſtles.
Middle TOE connected at the baſe to the outmoſt.

112. Waxen.

Garrulus Bohemicus. *Geſner av.* 703. *Aldr. av.* I. 395.
Bohemian Chatterer. *Wil. orn.* 133. *Bell's Travels.* I. 198.
Silk Tail. *Raii ſyn. av.* 85. *Ray's Letters,* 198. 200.
Le Jaſeur de Boheme, Bombycilla Bohemica. *Briſſon av.* II. 333. *Scopoli.* No. 20. *Phil. Tranſ.* No. 175.
Ampelis garrulus. *Lin. ſyſt.* 297.
Siden-Suantz, Snotuppa. *Faun. Suec. ſp.* 82.
Sieden vel Sieben Suands. *Brunnich* 25.
Zuſerl, Geidenſchweiffl. *Kram.* 363.
Seiden-ſchwantz. *Friſch,* I. 32. *Br. Zool.* 77. plate C. 1.

THESE birds appear but by accident in *South Britain:* about *Edinburgh* in *February,* they come annually and feed on the berries of the mountain aſh: they alſo appear as far ſouth as *Northumberland,* and like the fieldfare make the berries of the white thorn their food. Their native country is *Bohemia,* from whence they wander over *Europe,* and were once ſuperſtitiouſly conſidered as preſages of a peſtilence. They are gregarious: feed on grapes where vineyards are cultivated; are eſteemed delicious food: eaſily tamed.

Descrip.

The length of the bird I ſaw was eight inches: the bill ſhort, thick, and black; the baſe covered with black briſtles; from thence paſſes to the hind part of the head over each eye a bar of black: on the head is a ſharp pointed creſt reclining backwards: the *irides* are

# CHATTERER.

are of a bright ruby colour: the cheeks tawny: the throat black, with a ſmall briſtly tuft in the middle.

The head, creſt, and back aſh colored mixed with red: the rump a fine cinereous: breaſt and belly, pale cheſnut daſhed with a vinaceous caſt: the vent feathers bright bay: the lower part of the tail black; the end of a rich yellow: the leſſer coverts of the wings brown, the greater black tipt with white: the quil feathers black, the three firſt tipt with white; the ſix next have half an inch of their exterior margin edged with fine yellow, the interior with white. But what diſtinguiſhes this from all other birds are the horny appendages from the tips of ſeven of the ſecondary feathers of the color and gloſs of the beſt red wax; ſome have one more or one leſs: The legs are black.

I think that the females want the yellow marks in the wings.

XVIII. GROSBEAK

BILL ſtrong, thick, convex above and below.
NOSTRILS ſmall and round.
TONGUE as if cut off at the end.

113. Haw.

Le Groſbec ou Pinſon royal. *Belon av.* 373.
Coccothrauſtes (ſteinbeiſſer) *Geſner av.* 276.
*Aldr. av.* II. 289.
Froſone. *Olina* 37.
Groſbeak, or Hawfinch. *Wil. orn.* 244. *Raii ſyn. av.* 85. *Charlton ex.* 91.
Dleſchk. *Scopoli,* No. 201.
*Edw. av.* 188. The male.
Le Groſbec. *Briſſon av.* III. 219. *Pl. enl.* 99, 100.
Loxia coccothrauſtes. *Lin. ſyſt.* 299.
Stenkneck. *Faun. Suec. ſp.* 222.
Kernbeis, Nuſbeiſſer. *Kram.* 365.
Kirſchfinch (Cherry-finch) *Friſch,* I. 4. *Brunnich. in append.*
*Br. Zool.* 105. plate U. F. 1.

THE birds we deſcribe were ſhot in *Shropſhire:* they viſit us only at uncertain times, and are not regularly migrant. They feed on berries; and even on the kernels of the ſtrongeſt ſtones, ſuch as thoſe of cherries and almonds, which they crack with the greateſt facility: their bills are well adapted to that work, being remarkably thick and ſtrong. Mr. *Willughby* tells us, they are common in *Germany* and *Italy*; that in the ſummer they live in woods, and breed in hollow trees, laying five or ſix eggs; but in the winter they come down into the plains.

Descrip. This ſpecies weighs near two ounces: its length is ſeven inches; the breadth thirteen: the bill is of a funnel ſhape; ſtrong, thick, and of a dull pale pink color; at the baſe are ſome orange colored feathers: the irides are grey: the crown of the head and cheeks of a fine deep bay: the chin black: from the bill to the eyes is a black

F. CROSS BILL.

PINE GROSBEAK. No 114.

black line: the breaſt and whole under ſide is of a dirty fleſh color: the neck aſh-colored: the back and coverts of the wings of a deep brown, thoſe of the tail of a yellowiſh bay: the greater quil-feathers are black, marked with white on their inner webs. The tail is ſhort, ſpotted with white on the inner ſides. The legs fleſh color.

The great particularity of this bird, and what diſtinguiſhes it from all others, is the form of the ends of the middle quil-feathers; which Mr. *Edwards* juſtly compares to the figure of ſome of the antient *battle-axes:* theſe feathers are gloſſed over with a rich blue; but are leſs conſpicuous in the female: the head in that ſex is of dull olive, tinged with brown; it alſo wants the black ſpot under the chin.

Loxia enucleator. *Lin. ſyſt.* 299. Tallbit, Natt-waka. *Faun. Suec.* No. 223. Greateſt Bulfinch. *Edw.* 123, 124. Coccothrauſtes Canadenſis. *Briſſon*, III. 250. 114. PINE.

THESE are common to *Hudſon's Bay*, *Sweden* and *Scotland*. I have ſeen them flying above the great pine foreſts of *Invercauld*, *Aberdeenſhire*. I imagine they breed there, for I ſaw them *Auguſt* 5th. They feed on the ſeeds of the pine. *Linnæus* ſays, they ſing in the night.

It is near twice the ſize of the bulfinch. The bill ſtrong, duſky, forked at the end; leſs thick than that of the common bulfinch: head, back, neck, and breaſt of a rich crimſon: the bottoms of the feathers aſh color; the middle of thoſe on the back and head black: the lower belly and vent aſh-color: the leſſer coverts of the wings duſky, edged with orange; the next with a broad ſtripe of white:

white: the loweſt order of greater coverts with another; exterior edges of the ſame color: the quil-feathers and tail duſky; their exterior edges of a dirty white: legs black: length nine inches and a half. There ſeems an agreement in colors, as well as food, between this ſpecies and the croſs-bill; one that I ſaw in *Scotland*, and believe to be the female, was (like the female croſs-bill) of a dirty green; the tail and quil-feathers duſky.

115. Cross-billed.

Loxia. *Geſner av.* 591.
*Aldr. av.* I. 426.
Shell-apple, or Croſs-bill. *Wil. orn.* 248.
*Raii. ſyn. av.* 86.
*Charlton ex.* 77.
*Edw. av.* 303.
*Cat. Carol. app.* 37.
Le Bec-croiſe. *Briſſon av.* III. 329. *tab.* 17. *fig.* 3.
Loxia curviroſtra. *Lin. ſyſt.* 299.
Korſſnaff, Kinlgelrifvare. *Faun. Suec. ſp.* 224. *Scopoli*, No. 200.
Krumbſchnabl, Kreutzvogel. *Kram.* 365.
Kreutz-Schnabel. *Friſch*, I. 11.
*Norveg.* Kors-Næb. Kors-fugl. *Br.* 238.
*Br. Zool.* 106. plate U. f. 2.

THERE are two varieties of this bird: Mr. *Edwards* has very accurately figured the leſſer, which we have ſeen frequently: the other is very rare. We received a male and female out of *Shropſhire*, which were ſuperior in ſize to the former, the bill remarkably thick and ſhort, more encurvated than that of the common kind, and the ends more blunt.

Theſe birds, like the former, are inconſtant viſitants of this iſland: in *Germany* and *Switzerland** they inhabit the pine foreſts, and breed in thoſe trees ſo early as the months of *January* and *February*. They feed on the ſeeds of the cones of pines and firs;

* *Geſner* 59. *Kramer Elench.* 365.

and

and are very dexterous in ſcaling them, for which purpoſe the croſs ſtructure of the lower mandible of their bill is admirably adapted; they feed alſo on hemp ſeed, and the pips or kernels of apples, and are ſaid to divide an apple with one ſtroke of the bill to get at the contents. *Linnæus* * ſays, that the upper mandible of this bird is moveable; but on examination we could not diſcover its ſtructure to differ from that of others of the genus.

It is an undoubted fact, that theſe birds change their colors; or rather the ſhades of their colors: that is, the males which are red, vary at certain ſeaſons to deep red, to orange, or to a ſort of a yellow: the females which are green, alter to different varieties of the ſame color.

116. BULFINCH.

Le Pivoine. *Belon av.* 359.
Aſprocolos, *obſ.* 13.
Rubicilla, ſive pyrrhula. *Geſner av.* 733.
*Aldr. av.* II. 326.
Ciufolotto. *Olina* 40.
Bulfinch, Alp, or Nope. *Wil. orn.* 247.
*Raii. ſyn. av.* 86.
Blutfinck, *Friſch*, I. 2.
Le Bouvreuil. *Briſſon av.* III. 308. *Pl. enl.* 145.
Monachino, Sufolotto. *Zinan.* 58.
Loxia pyrrhula. *Lin. ſyſt.* 300.
Domherre. *Faun. Suec. ſp.* 225.
Gumpl. *Kram.* 365. Gimpl. *Scopoli*, No. 202.
*Danis & Norvegis* Dom-pape, *quibuſdam* Dom-Herre. *Br.* 240.
*Br. Zool.* 106. plate U. f. 3. 4.

THE wild note of this bird is not in the leſt muſical; but when tamed it becomes remarkably docil, and may be taught any tune after a pipe, or to whiſtle any notes in the juſteſt manner: it ſeldom forgets what it has learned; and will become ſo tame as to come at call, perch on its maſter's ſhoulders, and

* *Faun. Suec. ſp.* 224.

(at

(at command) go through a difficult muſical leſſon. They may be taught to ſpeak, and ſome thus inſtructed are annually brought to *London* from *Germany*.

DESCRIP. The male is diſtinguiſhed from the female by the ſuperior blackneſs of its crown, and by the rich crimſon that adorns the cheeks, breaſt, belly, and throat of the male; thoſe of the female being of a dirty color: the bill is black, ſhort, and very thick: the head large: the hind part of the neck and the back are grey: the coverts of the wings are black; the lower croſſed with a white line: the quil-feathers duſky, but part of their inner webs white: the coverts of the tail and vent feathers white: the tail black.

In the ſpring theſe birds frequent our gardens, and are very deſtructive to our fruit-trees, by eating the tender buds. They breed about the latter end of *May*, or beginning of *June*, and are ſeldom ſeen at that time near houſes, as they chuſe ſome very retired place to breed in. Theſe birds are ſometimes wholly black; I have heard of a male bulfinch which had changed its colors after it had been taken in full feather, and with all its fine teints. The firſt year it began to aſſume a dull hue, blackening every year, till in the fourth it attained the deepeſt degree of that color. This was communicated to me by the Reverend Mr. *White* of *Selborne*. Mr. *Morton*, in his Hiſtory of *Northamptonſhire* * gives another inſtance of ſuch a change, with this addition, that the year following, after moulting, the bird recovered its native colors. Bulfinches fed entirely on hemp-ſeed are apteſt to undergo this change.

* Page 437.

Below

*Belon av.* 365.
Aſſarandos, *obſ.* 13.
Chloris. *Geſner av.* 258.
*Aldr. av.* II. 371.
*Olina*, 26.
*Wil. orn.* 246.
*Raii ſyn. av.* 85.
Le Verdier. *Briſſon av.* III. 190.
Grindling. *Scopoli*, No. 206.
Verdone, Verdero, Antone. *Zinan.* 63.
Loxia chloris. *Lin. ſyſt.* 304.
Swenſka. *Faun. Suec. ſp.* 226.
Svenſke. *Br.* 242.
Grunling. *Kram.* 368.
Grünfinck (Greenfinch) *Friſch*, I. 2.
*Br. Zool.* 107.

117. GREEN.

DESCRIP.

THE head and back of this bird are of a yellowiſh green; the edges of the feathers are grey; the rump more yellow: the breaſt of the ſame color; the lower belly white: the edges of the outmoſt quil-feathers are yellow, the next green, the fartheſt grey: the tail is a little forked: the two middle feathers are wholly duſky: the exterior webs of the four outmoſt feathers on both ſides the tail are yellow. The colors in the female are much leſs vivid than in the male.

NEST.

Theſe birds are very common in this iſland: they make their neſt in hedges; the outſide is compoſed of hay or ſtubble, the middle part of moſs, the inſide of feathers, wool, and hair. During breeding-time, that bird which is not engaged in incubation, or nutrition, has a pretty way of ſporting on wing over the buſh. They lay five or ſix eggs of a pale green color, marked with blood colored ſpots. Their native note has nothing muſical in it; but a late writer on ſinging-birds ſays, they may be taught to pipe or whiſtle in imitation of other birds.

This bird is ſo eaſily tamed, that it frequently eats out of one's hand five minutes after it is taken, if you have an opportunity of carrying it into the dark; the bird ſhould be then put upon your

finger, which it does not attempt to move from (as being in darkneſs it does not know where to fly) you then introduce the finger of your other hand under its breaſt, which, making it inconvenient to ſtay upon the firſt finger on which it was before placed, it climbs upon the ſecond, where it likewiſe continues, and for the ſame reaſon. When this hath been nine or ten times repeated, and the bird ſtroked and careſſed, it finds that you do not mean to do it any harm; and if the light is let in by degrees, it will very frequently eat any bruiſed ſeed out of your hand, and afterwards continue tame.

XIX. BUNTING.

BILL ſtrong and conic, the ſides of each mandible bending inwards: in the roof of the upper, a hard knob, of uſe to break and comminute hard ſeeds.

118. COMMON.

Le Proyer, Prier, ou Pruyer. *Belon av.* 266.
Emberiza alba. *Geſner av.* 654. *Aldr. av.* II. 264.
Strillozzo. *Olina*, 44. *Wil. orn.* 267. *Raii ſyn. av.* 93.
Le Proyer, Cynchramus. *Briſſon av.* III. 292. *Pl. enl.* 30.
Petrone, Capparone, Stardacchio. *Zinan.* 63.
Emberiza Miliaria. *Lin. ſyſt.* 308. *Faun. Suec. ſp.* 228.
Korn Larkor. *Lin. it. ſcan.* 292. *tab.* 4.
*Cimbris* Korn-Lærke. *Norveg.* Knotter. *Brunnich* 247.
Graue Ammer. *Friſch*, I. 6.
Braſler. *Kram.* 372.
*Br. Zool.* 111. plate W. f. 7.

DESCRIP.

THE bill of this bird, and the other ſpecies of this genus, is ſingularly conſtructed; the ſides of the upper mandible form a ſharp angle, bending inwards towards the lower; and in the roof of the former is a hard knob, adapted to bruiſe corn or other hard ſeeds.

The throat, breaſt, ſides, and belly are of a yellowiſh white: the head and upper part of the body of a pale brown, tinged with olive; each of which (except the belly) are marked with oblong black ſpots; towards the rump the ſpots grow fainter. The quill-feathers are duſky, their exterior edges of a pale yellow. The tail is a little forked, of a duſky hue, edged with white; the legs are of a pale yellow.

This bird reſides with us the whole year, and during winter collects in flocks.

119. Yellow.

*Belon av.* 366.
Emberiza flava. *Geſner av.* 653.
Cia pagglia riccia, Luteæ alterum genus. *Aldr. av.* II. 372.
*Wil. orn.* 268.
Yellow Hammer, *Raii ſyn. av.* 93.
Le Bruant. *Briſſon av.* III. 258.
*Pl. enl.* 30. f. 2.
Sternardt. *Scopoli*, No. 209.
Emberiza citrinella. *Lin. ſyſt.* 309.
Groning, Golſpink. *Faun. Suec. ſp.* 230.
Ammering, Goldammering. *Kram.* 370. *Friſch*, I. 5.

Nest. THIS ſpecies makes a large flat neſt on the ground, near or under a buſh or hedge; the materials are moſs, dried roots, and horſe hair interwoven. It lays ſix eggs of a white color, veined with a dark purple: is one of our commoneſt birds, and in winter frequents our farm yards with other ſmall birds.

Descrip. The bill is of a duſky hue: the crown of the head is of a pleaſant pale yellow; in ſome almoſt plain, in others ſpotted with brown: the hind part of the neck is tinged with green: the chin and throat are yellow: the breaſt is marked with an orange red: the belly yellow: the leſſer coverts of the wings are green; the others duſky, edged with ruſt color: the back of the ſame colors: the rump of a ruſty red: the quil-feathers duſky, their exterior ſides edged with yellowiſh green: the tail is a little forked; the middle feathers are brown; the two middlemoſt edged on both ſides with green; the others on their exterior ſides only: the interior ſides of the two outmoſt feathers are marked obliquely near their ends with white.

Schœniclus.

YELLOW HAMMER.

SNOW-BUNTING

N° 122

Schœniclus. *Geſner av.* 573, 652. *Wil. orn.* 269.
Reed Sparrow. *Raii ſyn. av.* 95.
The Nettle-monger. *Morton Northampt.* 428.
Ror-Spurv. *Brunnich.* 251.
L'Ortulan de Roſeaux, Hortulanus arundinaceus. *Briſſon av.* III. 274.
Emberiza ſchœniclus. *Lin. ſyſt.* 311.
Saf-ſparf. *Faun. Suec. ſp.* 231.
Rohrammering, Meerſpatz. *Kram.* 371.
Rohrammer (Reed-hammer) *Friſch*, I. 7.
*Br. Zool.* 112. plate W.

120. REED.

THE reed ſparrow inhabits marſhy places, moſt commonly among reeds; from which it takes its name. Its neſt is worthy notice for the artful contrivance of it, being faſtened to four reeds, and ſuſpended by them like a hammock, about three feet above the water; the cavity of the neſt is deep, but narrow, and the materials are ruſhes, fine bents and hairs. It lays four or five eggs, of a bluiſh white, marked with irregular purpliſh veins, eſpecially on the larger end. It is a bird much admired for its ſong, and like the nightingale it ſings in the night.

NEST.

In the male, the head, chin, and throat are black: the tongue livid: at each corner of the mouth commences a white ring, which encircles the head. At approach of winter the head changes to hoary, but on the return of ſpring reſumes its priſtine jettyneſs. The whole under ſide of the body is white. The back, coverts of the wings, and the ſcapular feathers are black, deeply bordered with red. The two middle feathers of the tail are of the ſame colors; the three next black. The exterior web, and part of the interior of the outmoſt feather is white. The head of the female is ruſt-coloured, ſpotted with black; it wants the white ring round the neck: but in moſt other reſpects reſembles the male.

DESCRIP.

Great

121. TAWNY. Great pied Mountain Finch, or Brambling. *Wil. orn.* 255. *Briſſon av.* III. 285.
*Raii ſyn. av.* 88. Schnee-ammer (Snow-hammer) *Friſch*, I. 6.
L'Ortolan de Neige, Hortulanus nivalis. *Br. Zool.* 112. plate f. 6.

DESCRIP. THE weight of this bird is rather more than an ounce: the length is ſix inches three quarters: the breadth twelve inches three quarters. The bill is very ſhort; yellow, except the point, which is black. The crown of the head is of a tawny color, darkeſt near the forehead: the whole neck is of the ſame color, but paler: the throat almoſt white: the upper part of the breaſt is of a dull yellow; the breaſt and whole under part of the body white, daſhed with a yellowiſh tinge. The back and ſcapular feathers are black, edged with a pale reddiſh brown: the rump and covert feathers of the tail are white on their lower half; on their upper, yellow.

The tail conſiſts of twelve feathers, and is a little forked: the three exterior feathers are white: the two outmoſt marked with a duſky ſpot on the exterior ſide; the third is marked with the ſame color on both ſides the tip: the reſt of the tail feathers are entirely duſky. The wings, when cloſed, reach about the middle of the tail: the color, of as much of the ſix firſt quil-feathers as appears in view, is duſky, ſlightly tipt with a reddiſh white: their lower part on both ſides white: in the ſeven ſucceeding feathers the duſky color gradually gives place to the white; which in the ſeventh of theſe poſſeſſes the whole feather, except a ſmall ſpot on the exterior upper ſide of each; the two next are wholly white: the

the reſt of the quil-feathers and the ſcapular feathers are black, edged with a pale red: the baſtard wing, and the outmoſt ſecondary feathers are of the ſame color with the quil-feathers: the reſt of them, together with the coverts, are entirely white, forming one large bed of white. The legs, feet and claws are black: the hind toe is very long, like that of a lark, but not ſo ſtrait.

Theſe birds are ſometimes found in different parts of *England*; but are not common. I am unacquainted with their breeding places, or their hiſtory: are ſometimes found white, and then miſtaken for white larks.

Emberiza nivalis. *Lin. ſyſt.* 308.
Snoſparf. *Faun. Suec.* No. 227.
Le Pincon de neige ou la niverolle *Briſſon*, III. 162.
*Cimbris*, ſneekok, vinter fugl. *Norvegis*. Sneefugl, Fialſter. *Brunnich*, 245.
Avis ignota a *Piperino* miſſa. *Geſner av.* 798.
*Scopoli*, No. 214.
Snow-bird, *Edw.* 126. *Egede Greenl.* 64 *Marten's Spitzbergen*, 73.
*Forſter in Ph. Tr.* vol. LXII. p. 403.

122. SNOW.

THE weight of this ſpecies is one ounce and a quarter: the bill and legs black: the forehead and crown white, with ſome mixture of black on the hind part of the head: the back of a full black, the rump white: the baſtard wing and ends of the greater coverts black, the others white: the quil-feathers black, their baſe white: the ſecondaries white, with a black ſpot on their inner webs. The middle feathers of their tail black; the three outmoſt white, with a duſky ſpot near their ends: from chin to tail of a pure white.

Theſe

Theſe birds are called in *Scotland*, *Snow-flakes*, from their appearance in hard weather and in deep ſnows. They arrive in that ſeaſon among the *Cheviot* hills, and in the *Highlands* in amazing flocks. A few breed in the laſt on the ſummit of the higheſt hills in the ſame places with the *Ptarmigans*; but the greateſt numbers migrate from the extreme north. They appear in the *Shetland* iſlands, then in the *Orknies*, and multitudes of them often fall, wearied with their flight, on veſſels in the *Pentland Firth*. Their appearance is a certain fore-runner of hard weather, and ſtorms of ſnow, being driven by the cold from their common retreats. Their progreſs ſouthward is probably thus; *Spitzbergen* and *Greenland*, *Hudſon*'s *Bay*, the *Lapland Alps*, *Scandinavia*, *Iceland*, the *Ferroe* iſles, *Shetland*, *Orknies*, *Scotland*, and the *Cheviot* hills. They viſit at that ſeaſon all parts of the northern hemiſphere, *Pruſſia*, *Auſtria*, and *Siberia** They arrive lean and return fat. In *Auſtria* they are caught and fed with millet, and like the *Ortolan*, grow exceſſively fat. In their flights, they keep very cloſe to each other, mingle moſt confuſedly together; and fling themſelves collectively into the form of a ball, at which inſtant the fowler makes great havoke among them.

* *Kram. Auſtria*, 372. *Bell's Travels*, I. 198.

Leſſer

Leſſer Mountain-finch, or Brambling. *Wil. orn.* 255. *Morton Northampt.* 423. *tab.* 13. *fig.* 3. *Br. Zool.* 113. 123. MOUNTAIN.

WE are obliged to borrow the following deſcription from the account of Mr. *Johnſon* tranſmitted to Mr. *Ray*; having never ſeen the bird. Mr. *Ray* ſuſpected that it was only a variety of the former, but Mr. *Morton*, having frequent opportunity of examining this ſpecies, proves it to be a diſtinct kind.

According to Mr. *Johnſon*, its bill is ſhort, thick, and ſtrong; black at the point, the reſt yellow. The forehead is of a dark cheſtnut; the hind part of the head and cheeks of a lighter; the hind part of the neck, and the back are aſh-colored; the latter more ſpotted with black; the throat is white: the breaſt and belly waved with flame color; at the ſetting on of the wing grey; the five firſt feathers are of a blackiſh brown, the reſt white with the point of each daſhed with brown: the three outmoſt feathers of the tail are white; the reſt dark brown; the feet black; the hind claw as long again as any of the reſt. The breaſt of the female is of a darker color than that of the male. The ſpecies, by the above-mentioned writer's account, is found in *Yorkſhire* and *Northamptonſhire*. DESCRIP.

XX. FINCH. BILL perfectly conic, ſlender towards the end, and ſharp-pointed.

124. GOLDFINCH.

*Belon av.* 353.
Carduelis. *Geſner av.* 242.
*Aldr. av.* II. 349.
Cardelli. *Olina*, 10.
Goldfinch, or Thiſtlefinch. *Wil. orn.* 256.
*Raii ſyn. av.* 89.
Le Chardonneret. *Briſſon av.* III. 53.
*Pl. Enl.* 4. f. 1.
Cardellino. *Zinan.* 59.
Fringilla carduelis. *Lin. ſyſt.* 318.
Stiglitza. *Faun. Suec. ſp.* 236.
Stiglitz. *Br.* 257. *Scopoli*, No. 211.
Stiglitz. *Kram.* 365. Diſtelfinck, *Friſch*, I. 1.
*Br. Zool.* 108. plate V. f. 1.

DESCRIP. THIS is the moſt beautifull of our hard billed ſmall birds; whether we conſider its colors, the elegance of its form, or the muſic of its note. The bill is white, tipt with black, the baſe is ſurrounded with a ring of rich ſcarlet feathers: from the corners of the mouth to the eyes is a black line: the cheeks are white: the top of the head is black; and the white on the cheeks is bounded almoſt to the forepart of the neck with black: the hind part of the head is white: the back, rump, and breaſt, are of a fine pale tawny brown, lighteſt on the two laſt: the belly is white: the covert feathers of the wings, in the male, are black: the quil-feathers black, marked in their middle with a beautifull yellow; the tips white: the tail is black, but moſt of the feathers marked near their ends with a white ſpot: the legs are white.

The female is diſtinguiſhed from the male by theſe notes; the feathers at the end of the bill in the former are brown; in the male black: the leſſer coverts of the wings are brown: and the black and

and yellow in the wings of the female are leſs brilliant. The young bird, before it moults, is grey on the head; and hence it is termed by the bird-catchers a *grey pate.*

There is another variety of goldfinch, which is, perhaps, not taken above once in two or three years, which is called by the *London* bird-catchers a *cheverel*, from the manner in which it concludes its *jerk:* when this ſort is taken, it ſells at a very high price: it is diſtinguiſhed from the common ſort by a white ſtreak, or by two, and ſometimes three white ſpots under the throat.

Their note is very ſweet, and they are much eſteemed on that account, as well as for their great docility. Towards winter they aſſemble in flocks, and feed on ſeeds of different kinds, particularly thoſe of the thiſtle. It is fond of orchards; and frequently builds in an apple or pear tree: its neſt is very elegantly formed of fine moſs, liverworts, and bents on the outſide; lined firſt with wool and hair, and then with the goſlin or cotton of the ſallow. It lays five white eggs, marked with deep purple ſpots on the upper end.

This bird ſeems to have been the χρυσομὶτρις* of *Ariſtotle*; being the only one that we know of, that could be diſtinguiſhed by a *golden fillet* round its head, feeding on the ſeeds of *prickly* plants. The very ingenious tranſlator† of *Virgil*'s eclogues and georgics, gives the name of this bird to the *acalanthis* or *acanthis:*

Littoraque *alcyonen* reſonant, *acanthida* dumi.

* Which he places among the ἀκανθοφάγα. *Scaliger* reads the word ῥυσομίτρις, which has no meaning; neither does the critic ſupport his alteration with any reaſons. *Hiſt. an.* 887.

† Dr. *Martyn.*

In our account of the *Halcyon* of the antients, p. 191 of the former edition, we followed his opinion; but having ſince met with a paſſage in *Ariſtotle* that clearly proves that *acanthis* could not be uſed in that ſenſe, we beg, that, till we can diſcover what it really is, the word may be rendered *linnet*; ſince it is impoſſible the philoſopher could diſtinguiſh a bird of ſuch ſtriking and brilliant colors as the *goldfinch*, by the epithet κακοχρους, or bad colored; and as he celebrates his *acanthis* for a fine note, φωνην μεν τοι λιγυραν εχουσι*, both characters will ſuit the linnet, being a bird as remarkable for the ſweetneſs of its note, as for the plaineſs of its plumage.

125. Chaffinch.

Le Pinſon. *Belon av.* 371.
Fringilla. *Geſner av.* 337.
*Aldr. av.* II. 356.
*Olina* 31.
*Wil. orn.* 253.
*Raii ſyn. av.* 88.
Fringuello. *Zinan.* 61.
Le Pinçon. *Briſſon av.* 148.
Schinkovitz. *Scopoli*, No. 217.
*Pl. enl.* 54. f. 1.
Fringilla cœlebs. *Lin. ſyſt.* 318.
Fincke, Bofincke. *Faun. Suec. ſp.* 232.
Buchfinck (Beachfinch). *Friſch*, I. 1.
Finke. *Kram.* 367.
Bofinke. *Br.* 253.
*Br. Zool.* 108. plate V. f. 2. 3.

THIS ſpecies entertains us agreeably with its ſong very early in the year; but towards the latter end of ſummer aſſumes a chirping note: both ſexes continue with us the whole year. What is very ſingular in *Sweden*, the females quit that country in *September*, migrating in flocks into *Holland*, leaving their mates behind;

* *Hiſt. an.* 1055.

in

in the ſpring they return.* In *Hampſhire* Mr. *White* has obſerved ſomething of this kind; vaſt flocks of females with ſcarcely any males among them. Their neſt is almoſt as elegantly conſtructed as that of the goldfinch, and of much the ſame materials, only the inſide has the addition of ſome large feathers. They lay four or five eggs, of a dull white color, tinged and ſpotted with deep purple.

Deſcrip. The bill is of a pale blue, the tip black: the feathers on the forehead black: the crown of the head, the hind part and the ſides of the neck are of a bluiſh grey: the ſpace above the eyes, the cheeks, throat, and forepart of the neck, are red: the ſides and belly white, tinged with red: the upper part of the back of a deep tawny color; the lower part and rump green: the coverts on the very ridge of the wing black and grey; beneath them is a large white ſpot: the baſtard wing and firſt greater coverts black, the reſt tipt with white: the quil-feathers black; their exterior ſides edged with pale yellow: their inner and outward webs white on their lower part, ſo as to form a third white line acroſs the wing: the tail is black, except the outmoſt feather, which is marked obliquely with a white line from top to bottom; and the next which has a white ſpot on the end of the inner web: the legs are duſky: the colors of the female are very dull: it entirely wants the red on the breaſt and other parts: the head and upper part of the body are of a dirty green: the belly and breaſt of a dirty white: the wings and tail marked much like thoſe of the male.

* *Amæn. acad.* II. 42. IV. 595.

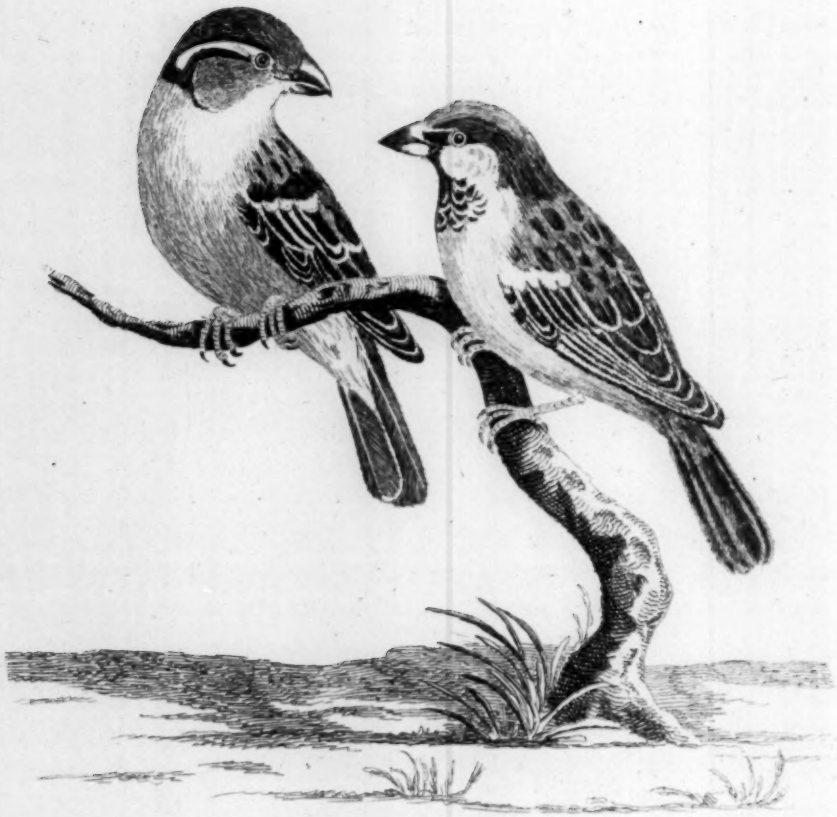
126. Brambling.

Le Montain. *Belon av.* 372.
Montifringilla montana. *Geſner av.* 388.
*Aldr. av.* II. 358.
Fringuello montanina. *Olina* 32.
Bramble, or Brambling. *Wil. orn.* 254.
Mountain-finch. *Raii ſyn. av.* 88.
Le Pinçon d'ardennes. *Briſſon av.* III. 155.
*Pl. enl.* 54. f. 2.
Fringilla montifringilla. *Lin. ſyſt.* 318.
Pinoſch. *Scopoli*, No. 218.
Norquint. *Faun. Suec ſp.* 233.
Quæker, Bofinkens Hore-Unge, Akerlan. *Brunnich* 255.
Nicowitz, Mecker, Piencken. *Kram.* 367.
Bergfinck (Mountainfinch) *Friſch*, I. 3. *Br. Zool.* 108. plate V. f. 4.

Descrip. THIS bird is not very common in theſe iſlands. It is ſuperior in ſize to the chaffinch: the top of the head is of a gloſſy black, ſlightly edged with a yellowiſh-brown: the feathers of the back are of the ſame colors, but the edges more deeply bordered with brown: the chin, throat, and breaſt are of an orange color: the leſſer coverts of the wings of the ſame color; but thoſe incumbent on the quil-feathers barred with black, tipt with orange: the inner coverts at the baſe of the wings are of a fine yellow: the quil-feathers are duſky; but their exterior ſides edged with yellow; the tail a little forked: the exterior web of the outmoſt feather is white, the others black, except the two middle, which are edged and tipt with aſh color.

Le

M. & F. SPARROWS.



M. Griffiths del

Le Moineau, Paiſſe, ou Moiſſon. *Belon av.* 361.
Paſſer. *Geſner av.* 643.
*Aldr. av.* II. 246.
Paſſera noſtrale. *Olina*, 42.
The Houſe-ſparrow. *Wil. orn.* 249. *Raii ſyn. av.* 86.
Le Moineau franc. *Briſſon av.* III. 72.
*Pl. enl.* 6. f. 1. 55. f. 1.
Fringilla domeſtica. *Lin. ſyſt.* 323.
Tatting, Graſparf. *Faun. Suec. ſp.* 242.
*Danis* Graae-Spurre. *Norveg.* Huus-Kald. *Br.* 264.
Hauſſpatz. *Kram.* 369.
*Br. Zool.* II. 300.

127. SPARROW.

THE bill of the male is black: the crown of the head is grey: under each eye is a black ſpot; above the corner of each is a broad bright bay mark, which ſurrounds the hind part of the head. The cheeks are white: the chin and under ſide of the neck are black; the latter edged with white: the belly of a dirty white: the leſſer coverts of the wings are of a bright bay: the laſt row black, tipt with white: the great coverts black, outwardly edged with red; the quil-feathers the ſame: the back ſpotted with red and black: tail duſky. DESCRIP.

The lower mandible of the bill of the female is white: beyond each eye is a line of white: the head and whole upper part are brown, only on the back are a few black ſpots: the black and white marks on the wings are obſcure; the lower ſide of the body is a dirty white.

Sparrows are proverbially ſalacious: they breed early in the ſpring, make their neſts under the eaves of houſes, in holes of walls, and very often in the neſts of the martin, after expelling the owner. *Linnæus* tells us (a tale from *Albertus Magnus)* that this inſult does not paſs unrevenged; the injured martin aſſembles its companions,

companions, who aſſiſt in plaiſtering up the entrance with dirt; then fly away, twittering in triumph, and leave the invader to periſh miſerably.

They will often breed in plumb-trees and apple-trees, in old rooks's neſts, and in the forks of boughs beneath them.

128. TREE SPARROW.

Paſſerinus. *Geſner av.* 656.
*Aldr. av.* II. 261.
*Olina*, 48.
*Wil. orn.* 252.
*Raii ſyn. av.* 87.
*Edw. av.* 269.
Le Moineau de Montagne, Paſſer montanus. *Briſſon av.* III. 79.
Paſſere Montano. *Zinan.* 81.
Fringilla montana *Lin. ſyſt.* 324.
*Faun. Suec ſp.* 243 *Scopoli*, No. 221.
Skov-Spurre. *Brunnich* 267.
Feldſpatz, Rohrſpatz. *Kram.* 370. *Friſch*, I. 1.
*Br Zool* 109.
Grabetz. *Scopoli*, No. 220.

THIS ſpecies is inferior in ſize to the common ſparrow. The bill is thick and black: the crown of the head; hind part of the neck; and the leſſer coverts of the wings, of a bright bay: the two firſt plain; the laſt ſpotted with black: the chin black; the cheeks and ſides of the head white, marked with a great black ſpot beneath each ear: the breaſt and belly of a dirty white. Juſt above the greater coverts is a row of feathers black edged with white; the greater coverts are black edged with ruſt color: quill-feathers duſky, edged with pale red: lower part of the back of an olive brown: tail brown: legs ſtraw color.

Theſe birds are very common in *Lincolnſhire*; are converſant among trees, and collect like the common kind in great flocks.

*Below*

Pl. LII.

*N° 128*

TREE SPARROW.

*N° 155*

SEDGE BIRD.

Pl. LIII

*N°. 129*

SISKIN. M. & F.

TWITE. M. & F. *N°.133*

*Belon av.* 354.
Acanthis, ſpinus, ligurinus. *Geſner av.* 1.
*Aldr. av.* II. 352.
Lucarino. *Olina*, 17.
*Wil. orn.* 261.
*Raii ſyn. av.* 91.
Le Serin. *Briſſon av.* III. 65.
Fringilla ſpinus. *Lin. ſyſt.* 322.
Siſka, Gronſiſka. *Faun. Suec. ſp.* 237.
Siſgen. *Brunnich*, 261.
Zeiſel, Zeiſerl. *Kram.* 366. *Friſch*, I. 2. *Scopoli*, No. 212.
*Br. Zool.* 109. plate V.

129. SISKIN.

DESCRIP. THE head of the male is black: the neck and back green; but the ſhafts on the latter are black: the rump is of a greeniſh yellow: the throat and breaſt the ſame: the belly white: the vent-feathers yellowiſh, marked with oblong duſky ſpots in their middle: the pinion quil is duſky edged with green: the outward webs of the nine next quil-feathers are green; the green part is widened by degrees in every feather, till in the laſt it takes up half the length: from the tenth almoſt the lower half of each feather is yellow, the upper black: the exterior coverts of the wings are black: the two middle feathers of the tail are black; the reſt above half way are of a moſt lovely yellow, with black tips. The colors of the female are paler: her throat and ſides are white ſpotted with brown; the head and back are of a greeniſh aſh color, marked alſo with brown.

Mr. *Willughby* tells us, that this is a ſong bird: that in *Suſſex* it is called the *barley-bird*, becauſe it comes to them in *barley-ſeed* time. We are informed that it viſits theſe iſlands at very uncertain times, like the groſbeak, &c. It is to be met with in the bird ſhops in *London*, and being rather a ſcarce bird, ſells at a higher price than the merit of its ſong deſerves: it is known there by the name of

the *Aberdavine*. The bird catchers have a notion of its coming out of *Ruſſia*. Dr. *Kramer* * informs us, that this bird conceals its neſt with great art; though there are infinite numbers of young birds in the woods on the banks of the *Danube*, that ſeem juſt to have taken flight, yet no one could diſcover it.

130. LINNET.

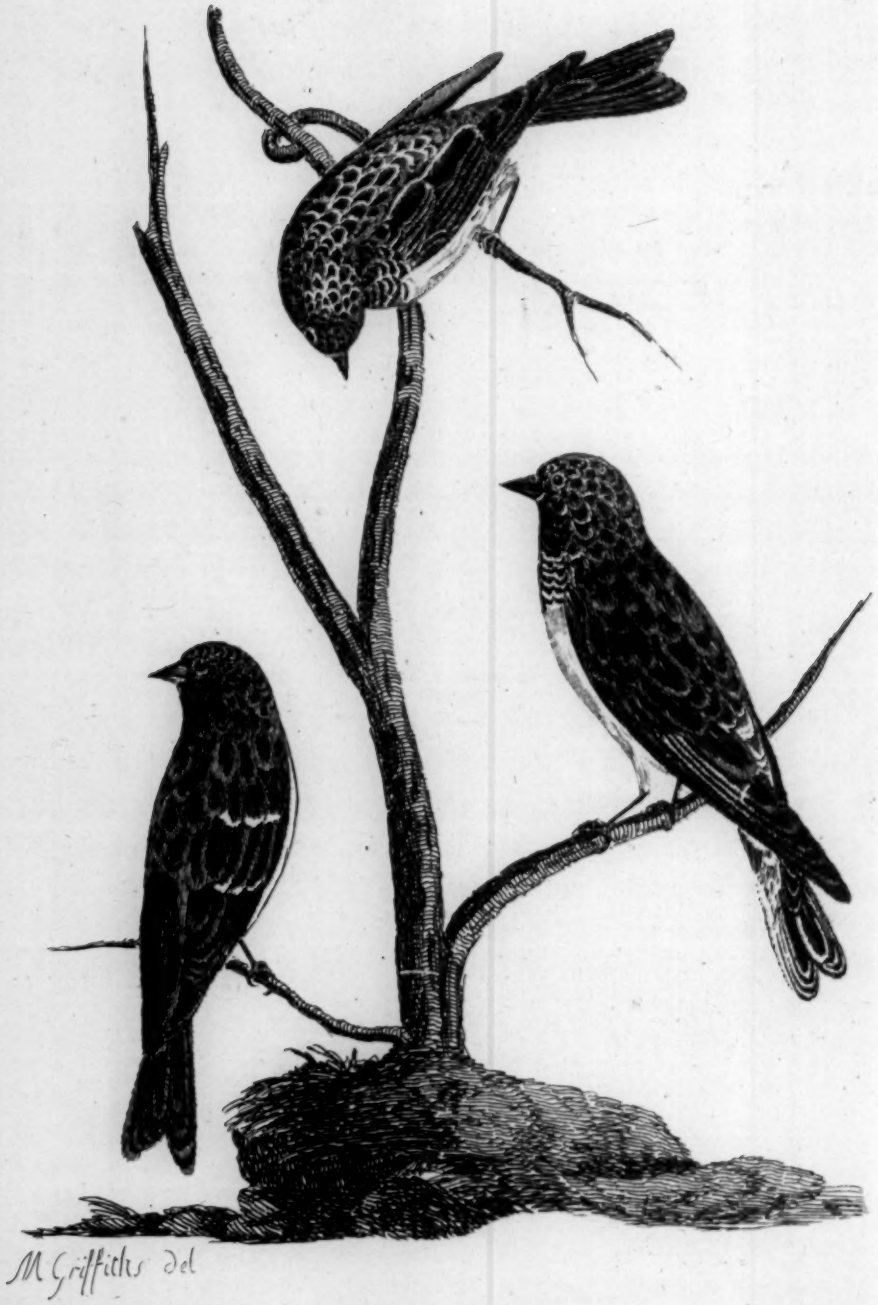
*Belon av.* 356.
Linaria, Henfling, Schofzling, Flacklin. *Geſner av.* 590.
Haenfling. *Friſch*, I. 9.
*Aldr. av.* II. 359.
*Wil. orn.* 258.
*Raii ſyn. av.* 90.
Fanello. *Zinan.* 61.
La Linotte. *Briſſon av.* III. 131.
*Pl. enl.* 151. f. 1.
*Br. Zool.* 110.

DESCRIP. THE bill of this ſpecies is duſky, but in the ſpring aſſumes a bluiſh caſt: the feathers on the head are black edged with aſh color: the ſides of the neck deep aſh color: the throat marked in the middle with a brown line; bounded on each ſide with a white one: the back black bordered with reddiſh brown: the bottom of the breaſt is of a fine blood red, which heighthens in color as the ſpring advances: the belly white: the vent feathers yellowiſh: the ſides under the wings ſpotted with brown: the quil-feathers are duſky; the lower part of the nine firſt white: the coverts incumbent on them black; the others of a reddiſh brown; the loweſt order tipt with a paler color: the tail is a little forked, of a brown color, edged with white; the two middle feathers excepted, which are bordered with dull red. The females and young

* *Kramer elench.* 366.

birds

## GREATER AND LESSER RED POLLS.



M. Griffiths del

birds want the red ſpot on the breaſt; in lieu of that, their breaſts are marked with ſhort ſtreaks of brown pointing downwards: the females have alſo leſs white in their wings.

Theſe birds are much eſteemed for their ſong: they feed on ſeeds of different kinds, which they peel before they eat: the ſeed of the *linum* or *flax* is their favorite food; from whence the name of the linnet tribe.

They breed among furze and white thorn: the outſide of their neſt is made with moſs and bents; and lined with wool and hair. They lay five whitiſh eggs, ſpotted like thoſe of the goldfinch.

131. RED HEADED LINNET.

Linaria rubra. *Geſner av.* 591.
Fanello marino. *Aldr. av.* II. 360. *Wil. orn.* 260. *Raii ſyn. av.* 91.
La grande Linotte des vignes. *Briſſon av.* III. 135.
Fringilla cannabina. *Lin. ſyſt.* 322. *Scopoli*, No. 219.
Hampling. *Faun. Suec. ſp.* 240. Torn-Iriſk. *Brunnich*, 263.
Hauefferl, Hampfling. *Kram.* 368.
Blut Hänfling (Bloody Linnet). *Friſch*, I. 9. *Br. Zool.* 110.

DESCRIP. THIS bird is leſs than the former: on the forehead is a blood colored ſpot; the reſt of the head and the neck are of an aſh color: the breaſt is tinged with a fine roſe color: the back, ſcapular feathers, and coverts of the wings, are of a bright reddiſh brown: the firſt quil-feather is entirely black; the exterior and interior edges of the eight following are white, which forms a bar of that color on the wing, even when cloſed: the ſides are yellow; the middle of the belly white: the tail, like that of the former, is forked, of a duſky color, edged on both ſides with white, which is

broadeſt on the inner webs. The head of the female is aſh color, ſpotted with black: the back and ſcapulars are of a dull browniſh red: and the breaſt and ſides of a dirty yellow, ſtreaked with duſky lines. It is a common fraud in the bird ſhops in *London*, when a male bird is diſtinguiſhed from the female by a red breaſt, as in the caſe of this bird, to ſtain or paint the feathers, ſo that the deceit is not eaſily diſcovered, without at leſt cloſe inſpection.

Theſe birds are frequent on our ſea-coaſts; and are often taken in *flight* time near *London:* it is a familiar bird; and is chearful in five minutes after it is caught.

132. LESS RED HEADED LINNET.

*Wil. orn.* 260.
*Raii ſyn. av.* 91.
La petite Linotte des vignes. *Briſſon av.* III. 138.
*Pl. enl.* 151. f. 2.
Fringilla linaria. *Lin. ſyſt.* 322.
Graſiſka. *Faun. Suec. ſp.* 241.
Graſel, Meerzeiſel, Tſchotſcherl. *Kram.* 369.
Rothplattige Staenfling. *Friſch*, I. 10.
*Br. Zool.* 111.

DESCRIP. THIS is the leſt of the linnets, being ſcarce half the ſize of the preceding. Its bill is duſky, but the baſe of the lower mandible yellow: the forehead ornamented with a rich ſhining ſpot of a purpliſh red: the breaſt is of the ſame color, but not ſo bright; yet in the breaſts of ſome we have found the red wanting: the belly is white: the back duſky, edged with reddiſh brown: the ſides in ſome yellowiſh, in others aſh color, but both marked with narrow duſky lines: the quil-feathers, and thoſe of the tail, are duſky, bordered with dirty white: the coverts duſky, edged with

with white, ſo as to form two tranſverſe lines of that color. The ſpot on the forehead of the female is of a ſaffron color. The legs are duſky.

We have ſeen the neſt of this ſpecies on an *alder* ſtump near a brook, between two or three feet from the ground: it was made on the outſide with dried ſtalks of graſs and other plants, and here and there a little wool, the lining was hair and a few feathers: the bird was *ſitting* on four eggs of a pale bluiſh green, thickly ſprinkled near the blunt end with ſmall reddiſh ſpots. The bird was ſo tenacious of her neſt, as to ſuffer us to take her off with our hand, and we found that after we had releaſed her ſhe would not forſake it.

This ſeems to be the ſpecies known about *London* under the name of *ſtone redpoll:* is gregarious.

Le Picaveret? *Belon av.* 358.
*Wil. orn.* 261.
*Raii ſyn. av.* 91.
Linaria montana. Linaria minima.

La petite Linotte, ou le Cabaret. *Briſſon av.* III. 142, 145.
Linaria fera ſaxatilis. *Klein. hiſt. av.* 93.
*Br. Zool.* 111.

133. TWITE.

THIS is an inhabitant of the hilly parts of our country, as Mr. *Willughby* informs us. He ſays it is twice the ſize of the laſt ſpecies: that the color of the head and back is the ſame with that of the common linnet: that the feathers on the throat and breaſt are black edged with white: the rump is of a rich ſcarlet or orange tawny color. The edges of the middle quil-feathers are white, as are the tips of thoſe of the ſecond row: the two middle feathers

feathers of the tail are of a uniform duſky color; the others edged with white. This ſpecies is taken in the flight ſeaſon near *London* with the linnets; it is there called a *Twite*. The birds we examined differed in ſome particulars from Mr. *Willughby*'s deſcription.

Descrip. In ſize they are rather inferior to the common linnet, and of a more taper make: their bills ſhort and entirely yellow: above and below each eye is a pale brown ſpot: the edges of the greater coverts of the wings white; in other reſpects both agree. The female wants the red mark on the rump.

Theſe birds take their name from their note, which has no muſic in it: it is a familiar bird, and more eaſily tamed than the common *linnet*.

We believe it breeds only in the *Northern* parts of our iſland.

Canary Bird. Here it may not be improper to mention the *Canary bird* *, which is of the finch tribe. It was originally peculiar to thoſe iſles, to which it owes its name; the ſame that were known to the antients by the addition of the *fortunate*. The happy temperament of the air, the ſpontaneous productions of the ground in the varieties of fruits; the ſprightly and chearful diſpoſition of the inhabitants †; and the harmony ariſing from the number of the birds found

* *Wil. orn.* 262. *Raii ſyn. av.* 91. *Vide* Serin des Canaries. *Briſſon av.* III. 184. Fringilla Canaria. *Lin. ſyſt.* 321.

† Fortunatæ *inſulæ abundant ſua ſponte genitis, et ſubinde aliis ſuper aliis innaſcentibus nihil ſolicitos alunt; beatius quam aliæ urbes excultæ. Mela de ſit. orb.* III. 17. He then relates the vaſt flow of mirth among this happy people, by a figurative ſort of expreſſion, that alludes to their tempering diſcretion with their jollity, and never ſuffering it to exceed the bounds of prudence. This he delivers under the notion of two fountains found among them, *alterum qui guſtavere riſu ſolvuntur in mortem; ita affectis remedium eſt ex altero bibere.*

there

there*, procured them that romantic diſtinction. Though the antients celebrate the iſle of *Canaria* for the multitude of birds, they have not mentioned any in particular. It is probable then, that our ſpecies was not introduced into *Europe* till after the ſecond diſcovery of theſe iſles, which was between the thirteenth and fourteenth centuries. We are uncertain when it firſt made its appearance in this quarter of the globe. *Belon*, who wrote in 1555, is ſilent in reſpect to theſe birds: *Geſner*† is the firſt who mentions them; and *Aldrovand*‡ ſpeaks of them as rarities; that they were very dear on account of the difficulty attending the bringing them from ſo diſtant a country, and that they were purchaſed by people of rank alone. *Olina*§ ſays, that in his time there was a degenerate ſort found on the iſle of *Elba*, off the coaſt of *Italy*, which came there originally by means of a ſhip bound from the *Canaries* to *Leghorn*, and was wrecked on that iſland. We once ſaw ſome ſmall birds brought directly from the *Canary Iſlands*, that we ſuſpect to be the genuine ſort; they were of a dull green color, but as they did not ſing, we ſuppoſed them to be hens. Theſe birds will produce with the goldfinch and linnet, and the offſpring is called a mule-bird, becauſe, like that animal, it proves barren.

They are ſtill found‖ on the ſame ſpot to which we were firſt indebted for the production of ſuch charming ſongſters; but they are now become ſo numerous in our country, that we are under no neceſſity of croſſing the ocean for them.

* *Omnes copia pomorum, et avium omnes generis abundant*, &c. *Plin.* lib. VI. C. 32.

† *Geſner av.* 240.

‡ *Aldr. av.* II. 355.

§ *Olina uccel.* 7.

‖ *Glas's hiſt. Canary Iſles*, 199.

XXI. FLY-CATCHER.

BILL flatted at the baſe; almoſt triangular: notched near the end of the upper mandible, and beſet with briſtles.

TOES divided to their origin.

134. Spotted.

Stoparola. *Aldr. av.* II. 324.
A ſmall bird without a name, like the *Stopparola* of *Aldrovand. Wil. orn.* 217.
*Zinan.* 45.
The Cobweb. *Morton Northampt.* 426.
*Raii ſyn. av.* 77.
Le Gobe-mouche, Muſcicapa. *Briſſon av.* II. 357. *tab.* 35. f. 3.
Muſcicāpa griſola. *Lin. ſyſt.* 328.
*Br. Zool.* 99. plate P. 2. f. 4.

THE fly-catcher is a bird of paſſage, appears in the ſpring, breeds with us, and retires in *Auguſt*. It builds its neſt on the ſides of trees, towards the middle: *Morton* ſays in the corners of walls where ſpiders weave their webs. We have ſeen them followed by four or five young, but never ſaw their eggs. When the young can fly the old ones withdraw with them into thick woods, where they frolick among the top branches; dropping from the boughs frequently quite perpendicular on the flies that ſport beneath, and riſe again in the ſame direction. It will alſo take its ſtand on the top of ſome ſtake or poſt, from whence it ſprings forth on its prey, returning ſtill to the ſame ſtand for many times together. They feed alſo on cherries, of which they ſeem very fond.

Descrip. The head is large, of a browniſh hue ſpotted obſcurely with black: the back of a mouſe color: the wings and tail duſky; the interior edges

edges of the quil-feathers edged with pale yellow: the breaſt and belly white; the ſhafts of the feathers on the former duſky; the throat and ſides under the wings are daſhed with red: the bill is very broad at the baſe, is ridged in the middle, and round the baſe are ſeveral ſhort briſtles: the inſide of the mouth is yellow: the legs and feet ſhort and black.

Atri capilla ſive ficedula. *Aldr. av.* II. 331.
Cold finch. *Wil. orn.* 236. *Raii ſyn. av.* 77. *Edw.* 30. *Friſche*, I. 22.
Le Traquet d' Angleterre. Rubetra anglicana. *Briſſon*, III. 436.
Meerſchwartz pluffle. *Kramer Auſt.* 377.
Cold-finch. *Br. Zool.*
Muſcicapa atricapilla. *Lin. ſyſt.* 326. *Faun. Suec.* No. 256. Tab. 1.

135. PIED.

THIS is leſſer than a hedge ſparrow. The bill and legs black: the forehead white: head, cheeks, and back black: the coverts of the tail ſpotted with white: coverts of the wings duſky, traverſed with a white bar: quil feathers duſky: the exterior ſides of the ſecondaries white; the interior duſky: the middle feathers of the tail black; the exterior marked with white: the whole under ſide of the body white. MALE.

The female wants the white ſpot on the forehead: the whole head, and upper part of the body duſky brown: the white in the wings leſs conſpicuous: the under ſide of the body of a dirty white. FEMALE.

Found in different parts of *England:* but is a rare ſpecies.

XXII. LARK.

Weak BILL, ſtrait, bending towards the point.
NOSTRILS covered with feathers or briſtles.
TOES divided to their origin.
BACK TOE armed with a long and ſtrait claw.

136. SKY.

L' Alouette. *Belon av.* 269.
Chamochilada. *Obſ.* 12.
Alauda ſine criſta. *Geſner av.* 78. *Aldr. av.* II. 369.
Lodola. *Olina*, 12.
Common Field Lark, or Sky Lark. *Wil. orn.* 203.
*Raii ſyn. av.* 69.
L' Alouette. *Briſſon av.* III. 335.
Allodola, Panterana. *Zinan.* 55.
Alauda arvenſis. *Lin. ſyſt.* 287.
Larka. *Faun. Suec. ſp.* 209.
Alauda cœlipeta. *Klein ſtem. Tab.* 15. f. 1.
Sang-Lœrke. *Br.* 221.
Feldlerche. *Kram.* 362. *Friſch*, I. 15. *Br. Zool.* 93. plate S. 2. f. 7.
Lauditza. *Scopoli*, No. 184.

DESCRIP.

THE length of this ſpecies is ſeven inches one-fourth: the breadth twelve and a half: the weight one ounce and a half: the tongue broad and cloven: the bill ſlender: the upper mandible duſky, the lower yellow: above the eyes is a yellow ſpot: the crown of the head a reddiſh brown ſpotted with deep black: the hind part of the head aſh-color: chin white. It has the faculty of erecting the feathers of the head. The feathers on the back, and coverts of the wings duſky edged with reddiſh brown, which is paler on the latter: the quil-feathers duſky: the exterior web edged with white, that of the others with reddiſh brown: the upper part of the breaſt yellow ſpotted with black: the lower part of the body of

of a pale yellow: the exterior web, and half of the interior web next to the ſhaft of the firſt feather of the tail are white; of the ſecond only the exterior web; the reſt of thoſe feathers duſky; the others are duſky edged with red; thoſe in the middle deeply ſo, the reſt very ſlightly: the legs duſky: ſoles of the feet yellow: the hind claw very long and ſtrait.

This and the wood lark are the only birds that ſing as they fly; this raiſing its note as it ſoars, and lowering it till it quite dies away as it deſcends. It will often ſoar to ſuch a height, that we are charmed with the muſic when we loſe ſight of the ſongſter; it alſo begins its ſong before the earlieſt dawn. *Milton*, in his *Allegro*, moſt beautifully expreſſes theſe circumſtances: and Bp. *Newton* obſerves, that the beautifull ſcene that *Milton* exhibits of rural chearfulneſs, at the ſame time gives us a fine picture of the regularity of his life, and the innocency of his own mind; thus he deſcribes himſelf as in a ſituation

> To hear the lark begin his flight,
> And ſinging ſtartle the dull night,
> From his watch tower in the ſkies,
> 'Till the dappled dawn doth riſe.

It continues its harmony ſeveral months, beginning early in the ſpring, on pairing. In the winter they aſſemble in vaſt flocks, grow very fat, and are taken in great numbers for our tables. They build their neſt on the ground, beneath ſome clod; forming it of hay, dry fibres, &c. and lay four or five eggs.

The place theſe birds are taken in the greateſt quantity, is the neighbourhood of *Dunſtable:* the ſeaſon begins about the fourteenth of *September*, and ends the twenty-fifth of *February*; and during

that ſpace, about 4000 dozen are caught, which ſupply the markets of the metropolis. Thoſe caught in the day are taken in clap-nets of fiveteen yards length, and two and a half in breadth; and are enticed within their reach by means of bits of looking-glaſs, fixed in a piece of wood, and placed in the middle of the nets, which are put in a quick whirling motion, by a ſtring the larker commands; he alſo makes uſe of a decoy lark. Theſe nets are uſed only till the fourteenth of *November*, for the larks will not *dare*, or frolick in the air except in fine ſunny weather; and of courſe cannot be inviegled into the ſnare. When the weather grows gloomy, the larker changes his engine, and makes uſe of a trammel net twenty-ſeven or twenty-eight feet long, and five broad; which is put on two poles eighteen feet long, and carried by men under each arm, who paſs over the fields and quarter the ground as a ſetting dog; when they hear or feel a lark hit the net, they drop it down, and ſo the birds are taken.

137. WOOD. Tottavilla. *Olina*, 27.
*Wil. orn.* 204.
*Raii ſyn. av.* 69.
L' Alouette de Bois ou le Cujelier. *Briſſon av.* III. 340. *Tab.* 20. *fig.* 1.
Alauda arborea. *Lin. ſyſt.* 287.
*Faun. Suec. ſp.* 211.
Ludllerche, Waldlerche. *Kram.* 362.
*Danis* Skov-Lerke, *Cimbris* Heede-Lerke, Lyng-Lerke. *Br.* 224.
*Br. Zool.* 94. plate Q. f. 3.
Zippa. *Scopoli*, No. 186.

THIS bird is inferior in ſize to the ſky lark, and is of a ſhorter thicker form; the colors are paler, and its note leſs ſonorous and leſs varied, though not leſs ſweet. Theſe and the following characters,

characters, may ſerve at once to diſtinguiſh it from the common kind: it perches on trees; it whiſtles like the black-bird. The crown of the head, and the back, are marked with large black ſpots edged with pale reddiſh brown: the head is ſurrounded with a whitiſh coronet of feathers, reaching from eye to eye: the throat is of yellowiſh white, ſpotted with black: the breaſt is tinged with red: the belly white: the coverts of the wings are brown, edged with white and dull yellow: the quil-feathers duſky; the exterior edges of the three firſt white; of the others yellow, and their tips blunt and white: the firſt feather of the wing is ſhorter than the ſecond; in the common lark it is near equal: the tail is black, the outmoſt feather is tipt with white: the exterior web, and inner ſide of the interior are alſo white; in the ſecond feather, the exterior web only: the legs are of a dull yellow; the hind claw very long. The wood lark will ſing in the night; and, like the common lark, will ſing as it flies. It builds on the ground, and makes its neſt on the outſide with moſs, within of dried bents lined with a few hairs. It lays five eggs, duſky and blotched with deep brown, marks darkeſt at the thicker end. DESCRIP.

The males of this and the laſt are known from the females by their ſuperior ſize. But this ſpecies is not near ſo numerous as that of the common kind.

138. TIT. La Farlouſe, Fallope ou L'Alouette de pre. *Belon av.* 272.
*Aldr. av.* II. 370.
Lodolo di Prato. *Olina*, 27.
*Wil. orn.* 206.
*Raii ſyn. av.* 69.
L'Alouette de prez ou la Farlouſe. *Briſſon av.* III. 343.
Mattolina, Petragnola, Corriera. *Zinan.* 55.
Alauda pratenſis. *Lin. ſyſt.* 287.
*Faun. Suec. ſp.* 210.
Wieſen Lerche (Meadows Lark) *Friſch*, I. 16.
Englerke. *Br.* 223.
*Br. Zool.* 94. plates Q. f. 6. P. 1. f. 3.

THIS bird is found frequently in low marſhy grounds: like other larks it builds its neſt among the graſs, and lays five or ſix eggs. Like the woodlark it ſits on trees; and has a moſt remarkable fine note, ſinging in all ſituations, on trees, on the ground, while it is ſporting in the air, and particularly in its deſcent. This bird with many others, ſuch as the thruſh, blackbird, willow wren, &c. become ſilent about midſummer, and reſume their notes in *September:* hence the interval is the moſt mute of the year's three vocal ſeaſons, ſpring, ſummer, and autumn. Perhaps the birds are induced to ſing again as the autumnal temperament reſembles the vernal.

DESCRIP. It is a bird of an elegant ſlender ſhape: the length is five inches and a half: the breadth nine inches: the bill is black: the back and head is of a greeniſh brown, ſpotted with black: the throat and lower part of the belly are white: the breaſt yellow, marked with oblong ſpots of black: the tail is duſky; the exterior feather is varied by a bar of white, which runs acroſs the end and takes in the whole outmoſt web. The claw on the hind toe is very long, the feet yellowiſh: the ſubject figured in plate P. 1. of the *folio* edition, is a variety with duſky legs, ſhot on the rocks on the coaſt of *Caernarvonſhire.*

The

The Leſſer Field Lark. *Wil. orn.* 207. 139. FIELD.

THIS ſpecies we received from Mr. *Plymly*. It is larger than the *tit lark*; the head and hind part of the neck are of a pale brown, ſpotted with duſky lines, which on the neck are very faint. The back and rump are of a dirty green; the former marked in the middle of each feather with black, the latter plain. The coverts of the wings duſky, deeply edged with white. The quil-feathers duſky; the exterior web of the firſt edged with white, of the others with a yellowiſh green. DESCRIP.

The throat is yellow: the breaſt of the ſame color, marked with large black ſpots: the belly and vent-feathers white: on the thighs are a few dusky oblong lines: the tail is dusky: half the exterior and interior web of the outmoſt feather is white; the next is marked near the end with a ſhort white ſtripe pointing downwards. The legs are of a very pale brown; and the claw on the hind toe very ſhort for one of the lark kind, which ſtrongly diſtinguiſhes it from the *tit lark*.

*Edw.* 297. *Br. Zool.* II. 239. *Briſſon Suppl.* 94. 140. RED.

I MET with this ſpecies in the magnificent and elegant *Muſeum* of ASHTON LEVER, Eſq; where the lover of *Britiſh* or exotic ornithology, may find delight and inſtruction equally intermixed.

This

This ſpecies is equal in ſize to the common lark. A white line croſſes each eye, and another paſſes beneath. The bill is thick: the chin and throat whitiſh: the head, neck, back, and coverts of the wings of a ruſty brown, ſpotted with black: breaſt whitiſh, with dusky ſpots: belly of a dirty white: the middle feather of the tail black edged with brown: the two exterior white: legs of a pale brown.

This bird is common to the neighbourhood of *London*, to *North America*, and to the South of *Europe*; but with us is rare. Mr. *Edwards* firſt diſcovered it: he remarks, that when the wing is gathered up, the third primary feather reaches to the tip of the firſt.

141. CRESTED. Alauda criſtata minor. *Aldr. av.* II. 371. *Wil. orn.* 209. *Raii ſyn. av.* 69. La petite alouette hupée. *Briſſon av.* III. 361. *Br. Zool.* 95.

THIS ſpecies we find in Mr. *Ray*'s hiſtory of *Engliſh* birds; who ſays it is found in *Yorkſhire*, and gives us only this brief deſcription of it, from *Aldrovandus:* it is like the greater creſted lark, but much leſs, and not ſo brown; that it hath a conſiderable tuft on its head for the ſmallneſs of its body; and that its legs are red. We never ſaw this kind; but by Mr. *Bolton*'s liſt of *Yorkſhire* birds, which he favored us with, we are informed it is in plenty in that country.

Slender

Nº 142

## WHITE WAGTAIL.

## YELLOW WAGTAIL.

Nº 143

## SKY LARK.

Nº 136

Slender BILL, with a ſmall tooth near the end of the upper mandible.
Lacerated TONGUE.
Long TAIL.

XXIII. WAGTAIL.

*Belon av.* 349.
Motacilla alba. *Geſner av.* 618.
*Aldr. av.* II. 323.
Ballarina, Cutrettola. *Olina*, 43.
*Wil. orn.* 237.
*Raii ſyn. av.* 75.
La Lavandiere. *Briſſon av.* III. 461.
Monachina. *Zinan.* 51.
Pliſka, Paſtaritra. *Scopoli*, No. 224.
M. alba. *Lin. ſyſt.* 331.
Arla, Sadeſarla. *Faun. Suec. ſp.* 252.
*Danis* Vip-Stiert, Havre-Sæer. *Norvegis* Erle, Lin-Erle. *Brunnich*, 271.
Weiſs und ſchwartze Bachſteltze. *Friſch*, I. 23.
Graue Bachſtelze. *Kram.* 374.
*Br. Zool.* 104.

142. WHITE WAGTAIL.

THIS bird frequents the ſides of ponds, and ſmall ſtreams; and feeds on inſects and worms, as do all the reſt of this genus. Mr. *Willughby* juſtly obſerves, that this ſpecies ſhifts its quarters in the winter; moving from the north to the ſouth of *England*, during that ſeaſon. In ſpring and autumn it is a conſtant attendant of the plough, for the ſake of the worms thrown up by that inſtrument.

DESCRIP.

The head, back, and upper and lower ſide of the neck as far as the breaſt are black: in ſome the chin is white, and the throat marked with a black creſcent: the breaſt and belly are white: the quil-feathers are duſky: the coverts black tipt and edged with white. The tail is very long, and always in motion. The exterior

feather on each ſide is white: the lower part of the inner web excepted, which is duſky; the others black: the bill, inſide of the mouth, and the legs, are black. The back claw very long.

143. Yellow Wagtail.

Suſurada. *Belon obſ.* II.
Motacilla flava (Gale Waſſarſteltz). *Geſner av.* 618. *Aldr. av.* II. 323. *Wil. orn.* 238. *Raii ſyn. av.* 75. *Edw. av.* 258. The Male.
Codatremola. *Zinan.* 51.
La Bergeronette du Printemps, Motacilla verna. *Briſſon av.* III. 468. *Pl. enl.* 28. f. 1.
Motacilla flava. *Lin. ſyſt.* 331.
Gelb-brüſtige Bachſteltze. *Friſch*, I. 23. *Faun. Suec. ſp.* 253.
Gulſpink. *Brunnich.* 273.
Gelbe Bachſtelze. *Kram.* 374. *Scopoli*, No. 225.
*Br. Zool.* 105.

Descrip. THE male is a bird of great beauty: the breaſt, belly, thighs, and vent-feathers, being of a moſt vivid and lovely yellow: the throat is marked with ſome large black ſpots: above the eye is a bright yellow line: beneath that, from the bill croſs the eye is another of a dusky hue; and beneath the eye is a third of the ſame color: the head and whole upper part of the body is of an olive green, which brightens in the coverts of the tail; the quil-feathers are dusky: the coverts of the wings olive colored, but the lower rows dusky, tipt with yellowiſh white: the two outmoſt feathers of the tail half white; the others black, as in the former.

The colors of the female are far more obſcure than thoſe of the male: it wants alſo thoſe black ſpots on the throat.

It makes its neſt on the ground, in corn fields: the outſide is compoſed of decayed ſtems of plants, and ſmall fibrous roots; the inſide is lined with hair: it lays five eggs. This ſpecies migrates in the North of *England*, but in *Hampſhire* continues the whole year.

La

La Bergerette. *Belon av.* 351.
Motacilla flava alia. *Aldr. av.* II. 323. *Wil. orn.* 238. *Raii ſyn. av.* 75. *Edw. av.* 259. The Male.

La Bergeronette jaune, Motacilla flava. *Briſſon av.* III. 471. *tab.* 23. *fig.* 3. The Male. *Br. Zool.* 105.

144. GREY WAGTAIL.

THE top of the head, upper part of the neck, and the back of this ſpecies are aſh colored; ſlightly edged with yellowiſh green: the ſpace round each eye is aſh colored: beneath and above which is a line of white: in the male, the chin and throat are black: the feathers incumbent on the tail are yellow: the tail is longer, in proportion to its ſize, than that of the other kinds: the two exterior feathers are white; the reſt black: the breaſt, and whole under ſide of the body are yellow: the quil-feathers are dusky; thoſe next the back edged with yellow. The colors of the female are uſually more obſcure; and the black ſpot on the throat is wanting in that ſex. DESCRIP.

The birds of this genus are much in motion: ſeldom perch: perpetually flirting their tails: ſcream when they fly: frequent waters: feed on inſects; and make their neſts on the ground.

XXIV. WARBLERS

BILL ſlender and weak.
NOSTRILS ſmall and ſunk.
Exterior TOE joined at the under part of the laſt joint to the middle toe.

* Thoſe with tails of one color.

** Thoſe with particolored tails.

145. NIGHTINGALE.

Le Roſſignol. *Belon av.* 335.
Adoni, Aidoni. *Obſ.* 12.
Luſcinia. *Geſner av.* 592.
*Aldr. av.* II. 336.
*Wil. orn.* 220.
*Raii ſyn. av.* 78.
Le Roſſignol. *Briſſon av.* III. 397.
Slauz. *Scopoli*, No. 227.
Ruſignulo. *Zinan.* 54.
Motacilla luſcinia. *Lin. ſyſt.* 328.
Nachtergahl. *Faun. Suec. ſp.* 244.
*Haſſelquiſt Itin. Ter. Sanct.* 291.
Nattergale. *Brunnich in append.*
Au-vogel, Auen-nachtigall. *Kram.* 376.
Nachtigall. *Friſch*, I. 21.
*Br. Zool.* 100. plate S. 1. f. 2.

DESCRIP. THE nightingale takes its name from *night*, and the *Saxon* word *galan* to ſing; expreſſive of the time of its melody. In ſize it is equal to the *redſtart*; but longer bodied, and more elegantly made. The colors are very plain. The head and back are of a pale tawny, daſhed with olive: the tail is of a deep tawny red: the throat, breaſt, and upper part of the belly of a light gloſſy aſh-color: the lower belly almoſt white: the exterior webs of the quill-feathers are of a dull reddiſh brown; the interior of browniſh aſh-color:

color: the irides are hazel, and the eyes remarkably large and piercing: the legs and feet a deep aſh-color.

This bird, the moſt famed of the feathered tribe, for the variety*, length, and ſweetneſs of its notes, viſits *England* the beginning of *April*, and leaves us in *Auguſt*. It is a ſpecies that does not ſpread itſelf over the iſland. It is not found in *North Wales*; or in any of the *Engliſh* counties north of it, except *Yorkſhire*, where they are met with in great plenty about *Doncaſter*. They have been alſo heard, but rarely, near *Shrewſbury*. It is alſo remarkable, that this bird does not migrate ſo far weſt as *Devonſhire* and *Cornwall*; counties where the ſeaſons are ſo very mild, that myrtles flouriſh in the open air during the whole year: neither are they found in *Ireland*. *Sibbald* places them in his liſt of *Scotch* birds; but they certainly are unknown in that part of *Great Britain*, probably from the ſcarcity and the recent introduction of hedges there. Yet they viſit *Sweden*, a much more ſevere climate. With us they frequent thick hedges, and low coppices; and generally keep in the middle of the buſh, ſo that they are very rarely ſeen. They form their neſt of oak leaves, a few bents and reeds. The eggs are of a deep brown. When the young firſt come abroad, and are helpleſs, the old birds make a plaintive and jarring noiſe with a ſort of ſnapping as if in menace, purſuing along the hedge the paſſengers.

They begin their ſong in the evening, and continue it the whole night. Theſe, their vigils, did not paſs unnoticed by the antients:

* For this reaſon, *Oppian*, in his *halieutics*, l. I. 728. gives the *nightingale* the epithet of ἀιολοφώνη, or *various voiced*; and *Heſiod*, (figuratively) of ποικιλοδειρα, or *various throated*. Εργα και ἡμέραι, l. 201.

the

the ſlumbers of theſe birds were proverbial; and not to reſt as much as the *nightingale*, expreſſed a very bad ſleeper *. This was the favorite bird of the *Britiſh* poet, who omits no opportunity of introducing it, and almoſt conſtantly noting its love of ſolitude and night. How finely does it ſerve to compoſe part of the ſolemn ſcenery of his *Penſeroſo*; when he deſcribes it

> In her ſaddeſt ſweeteſt plight,
> Smoothing the rugged brow of night;
> While *Cynthia* checks her dragon yoke,
> Gently o'er th' accuſtom'd oak;
> Sweet bird, that ſhunn'ſt the noiſe of folly,
> Moſt muſical, moſt melancholy!
> Thee, chauntreſs, oft the woods among,
> I woo to hear thy evening ſong.

In another place he ſtyles it the *ſolemn bird*; and again ſpeaks of it,

> As the wakeful bird
> Sings darkling, and in ſhadieſt covert hid,
> Tunes her nocturnal note.

The reader muſt excuſe a few more quotations from the ſame poet, on the ſame ſubject; the firſt deſcribes the approach of evening, and the retiring of all animals to their repoſe.

> Silence accompanied; for beaſt and bird,
> They to their graſſy couch, theſe to their neſts
> Were ſlunk; all but the wakeful *nightingale*,
> She all night long her amorous deſcant ſung.

* *Ælian var. hiſt.* 577. both in the text and note. It muſt be remarked, that nightingales ſing alſo in the day.

When

When *Eve* paſſed the irkſome night preceding her fall, ſhe, in a dream, imagines herſelf thus reproached with loſing the beauties of the night by indulging too long a repoſe:

> Why ſleep'ſt thou, *Eve?* now is the pleaſant time,
> The cool, the ſilent, ſave where ſilence yields
> To the night-warbling bird, that now awake
> Tunes ſweeteſt his love-labor'd ſong.

The ſame birds ſing their nuptial ſong, and lull them to reſt. How rapturous are the following lines! how expreſſive of the delicate ſenſibility of our *Milton*'s tender ideas!

> The Earth
> Gave ſign of gratulation, and each hill;
> Joyous the birds; freſh gales and gentle airs
> Whiſper'd it to the woods, and from their wings
> Flung roſe, flung odors from the ſpicy ſhrub,
> Diſporting, till the amorous bird of night
> Sung ſpouſal, and bid haſte the evening ſtar
> On his hill-top to light the bridal lamp.
>
> Theſe, lull'd by *nightingales*, embracing ſlept;
> And on their naked limbs the flowery roof
> Shower'd roſes, which the morn repair'd.

Theſe quotations from the beſt judge of melody, we thought due to the ſweeteſt of our feathered choiriſters; and we believe no reader of taſte will think them tedious.

*Virgil* ſeems to be the only poet among the antients, who hath attended to the circumſtance of this bird's ſinging in the night time.

Qualis

Qualis populeâ mœrens *Philomela* ſub umbrâ
Amiſſos queritur fœtus, quos durus arator
Obſervans nido implumes detraxit: at illa
*Flet noctem*, ramoque ſedens miſerabile carmen
Integrat, et mœſtis late loca queſtibus implet.

*Georg.* IV. l. 511.

As *Philomel* in poplar ſhades, alone,
For her loſt offſpring pours a mother's moan,
Which ſome rough ploughman marking for his prey,
From the warm neſt, unfledg'd hath dragg'd away;
Percht on a bough, ſhe all night long complains,
And fills the grove with ſad repeated ſtrains.

*F. Warton.*

*Pliny* has deſcribed the warbling notes of this bird, with an elegance that beſpeaks an exquiſite ſenſibility of taſte: notwithſtanding that his words have been cited by moſt other writers on natural hiſtory, yet ſuch is the beauty, and in general the truth of his expreſſions, that they cannot be too much ſtudied by lovers of natural hiſtory, therefore clame a place in a work of this kind. We muſt obſerve notwithſtanding, that a few of his thoughts are more to be admired for their vivacity than for ſtrict philoſophical reaſoning; but theſe few are eaſily diſtinguiſhable.

" *Luſciniis* diebus ac noctibus continuis xv. garrulus ſine intermiſſu cantus,
" denſante ſe frondium germine, non in noviſſimum digna miratu ave. Primum
" tanta vox tam parvo in corpuſculo, tam pertinax ſpiritus. Deinde in una per-
" fecta muſicæ ſcientia modulatus editur ſonus: & nunc continuo ſpiritu trahitur
" in longum, nunc variatur inflexo, nunc diſtinguitur conciſo, copulatur in-
" torto: promittitur revocato, infuſcatur ex inopinato: interdum & ſecum ipſe
" murmurat: plenus, gravis, acutus, creber, extentus, ubi viſum eſt, vibrans,
" ſummus, medius, imus. Breviterque omnia tam parvulis in faucibus, quæ

" tot

" tot exquiſitis tibiarum tormentis ars hominum excogitavit: ut non ſit dubium " hanc ſuavitatem præmonſtratam efficaci auſpicio, cum in ore *Steſichori* cecinit " infantis. Ac ne quis dubitet artis eſſe, plures ſingulis ſunt cantus, nec iidem " omnibus, ſed ſui cuique. Certant inter ſe, palamque animoſa contentio eſt. " Victa morte finit ſæpe vitam, ſpiritu prius deficiente, quam cantu. Meditan- " tur aliæ juniores, verſuſque quos imitentur accipiunt. Audit diſcipula inten- " tione magna & reddit, vicibuſque reticent. Intelligitur emendatæ correctio & " in docente quædam reprehenſio" *.

146. REDSTART.

Le Roſſignol de Muraille. *Belon av.* 347.
Ruticilla, ſive Phœnicurus (Sommerotele) *Geſner av.* 731.
*Aldr. av.* II. 327.
Codoroſſo. *Olina*, 47.
*Wil. orn.* 218.
*Raii ſyn. av.* 78.
Ruticilla. *Briſſon av.* III. 403.
Culo ranzo, Culo roſſo. *Zinan.* 53. *Scopoli*, No. 232.
Motacilla Phœnicurus. *Lin. ſyſt.* 335.
Rodſtjert. *Faun. Suec. ſp.* 257.
*Norvegis* Blod-fugl. *Danis* Roed-ſtiert. *Brunnich*, 280.
Schwartzkehlein (Blackthroat) *Friſch*, I. 19.
Waldrothſchweiffl. *Kram.* 376.
*Br. Zool.* 99. plate S. f. 6. 7.

THIS alſo appears among us only in the ſpring and ſummer, and is obſerved to come over nearly at the ſame time with the nightingale. It makes its neſt in hollow trees, and holes in walls and other buildings; which it forms with moſs on the outſide, and lines with hair and feathers. It lays four or five eggs, very like thoſe of the hedge-ſparrow, but rather paler, and more taper at the leſs end. This bird is ſo remarkably ſhy, that it will forſake its neſt, if the eggs are only touched. It has a very fine ſoft note; but being a ſullen bird, is with difficulty kept alive in

* *Plin.* lib. 10. c. 29.

confinement. It is remarkable in ſhaking its tail, it moves it horizontally as a dog does when fawning.

DESCRIP. The bill and legs of the male are black: the forehead white: the crown of the head, hind part of the neck, and the back are of a deep blue grey: the cheeks and throat black: the breaſt, rump and ſides are red: the two middle feathers of the tail brown, the others red: the wings brown. In the female, the top of the head and back are of a deep aſh-color: the rump and tail of a duller red than thoſe of the male: the chin white; the lower ſide of the neck cinereous; the breaſt of a paler red.

147. RED-BREAST.

Rubeline. *Belon av.* 348.
Rubecula. *Geſner av.* 730.
Erithacus. *Aldr. av.* II. 325.
*Olina*, 16.
Robin Red-breaſt, or Ruddock. *Wil. orn.* 219.
*Raii ſyn. av.* 78.
Le Rouge-gorge. *Briſſon av.* III. 418.
Pettoroſſo. *Zinan.* 46.
Motacilla rubecula. *Lin. ſyſt.* 337.
Rotgel. *Faun. Suec. ſp.* 260.
Roed-Finke, Roed-Kielke. *Br.* 283.
Rothkehlein. *Friſch*, I. 19.
Rothkropfl. *Kram.* 376.
*Br. Zool.* 100. plate S. 2.
Smarnza, Taſchtza. *Scopoli*, No. 231.

THIS bird, though ſo very petulant as to be at conſtant war with its own tribe, yet is remarkably ſociable with mankind: in the winter it frequently makes one of the family; and takes refuge from the inclemency of the ſeaſon even by our fire ſides. *Thomſon** has prettily deſcribed the annual viſits of this gueſt.

The RED-BREAST, ſacred to the houſhold gods,
Wiſely regardful of th' embroiling ſky,

* In his Seaſons, *vide Winter*, line 246.

In

In joyleſs fields, and thorny thickets, leaves
His ſhivering mates, and pays to truſted Man
His annual viſit. Half afraid, he firſt
Againſt the window beats; then, briſk, alights
On the warm hearth; then, hopping o'er the floor,
Eyes all the ſmiling family aſkance,
And pecks, and ſtarts, and wonders where he is:
'Till more familiar grown, the table-crumbs
Attract his ſlender feet.

The great beauty of that celebrated poet conſiſts in his elegant and juſt deſcriptions of the œconomy of animals; and the happy uſe* he hath made of natural knowlege, in deſcriptive poetry, ſhines through almoſt every page of his *Seaſons*. The affection this bird has for mankind, is alſo recorded in that antient ballad, † *The babes in the wood*; a compoſition of a moſt beautifull and pathetic ſimplicity. It is the firſt tryal of our humanity: the child that refrains from tears on hearing that read, gives but a bad preſage of the tenderneſs of his future ſenſations.

In the ſpring this bird retires to breed in the thickeſt covers, or the moſt concealed holes of walls and other buildings. The eggs are of a dull white, ſprinkled with reddiſh ſpots. Its ſong is remarkably fine and ſoft; and the more to be valued, as we enjoy it the greateſt part of the winter, and early in the ſpring, and even through great part of the ſummer, but its notes are part of that time drowned in the general warble of the ſeaſon. Many of the autumnal ſongſters ſeem to be the young cock red-breaſts of that year.

* *Vide our Preface.*

† Reliques of antient *Engliſh* Poetry, Vol. III. p. 170.

DESCRIP. The bill is duſky: the forehead, chin, throat and breaſt are of a deep orange color: the head, hind part of the neck, the back and tail are of a deep aſh-color, tinged with green: the wings rather darker; the edges inclining to yellow: the legs and feet duſky.

148. BLACK-CAP.

Atricapilla. *Geſner av.* 371, 384.
*Aldr. av.* II. 329.
*Wil. orn.* 226.
La Fauvette a tete noire, Curruca atricapilla. *Briſſon av.* III. 380.
Capinera. *Zinan.* 56.
*Olina*, 9. *Scopoli*, No. 229.
*Raii ſyn. av.* 79.
Motacilla atricapilla. *Lin. ſyſt.* 332.
*Faun. Suec. ſp.* 256.
Hav-Skade *quibuſdam* Spikke. *Br.* 228.
Moench mit der Schwartzen Platte (Monk with the black crown) *Friſch*, I 23.
Schwartz plattl. *Kram.* 377.
*Br. Zool.* 101. plate S. f. 5.

DESCRIP. THIS bird is among the ſmalleſt of this tribe, ſcarce weighing half an ounce. The crown of the head in the male is black: the hind part of the neck a light aſh-color: the back and coverts of the wings are of a greyiſh green: the quil-feathers and tail duſky, edged with dull green: the breaſt and upper part of the belly are of a pale aſh-color: the vent feathers whitiſh: the legs of a lead color. The female is diſtinguiſhed from the male by the ſpot on the head, which in that is of a dull ruſt-color. The black-cap is a bird of paſſage, leaving us before winter. It ſings very finely; and on that account is called in *Norfolk* the *mock-nightingale*. It has uſually a full, ſweet, deep, loud wild pipe; yet the ſtrain is of ſhort continuance; and his motions are deſultory: but when that bird ſits calmly, and in earneſt engages in ſong, he pours forth very ſweet but inward melody; and expreſſes great variety

variety of ſweet and gentle modulations, ſuperior perhaps to thoſe of any of our warblers, the nightingale excepted: and while they warble, their throats are wonderfully diſtended.

The black-cap frequents orchards and gardens. The laſt ſpring we diſcovered the neſt of this bird in a *ſpruce fir*, about two feet from the ground; the outſide was compoſed of the dried ſtalks of the *gooſe graſs*, with a little wool and green moſs round the verge; the inſide was lined with the fibres of roots, thinly covered with black horſe hair. There were five eggs of a pale reddiſh brown, mottled with a deeper color, and ſprinkled with a few dark ſpots.

Ficedula. *Geſner*, 385.
Beccafigo, or Fig eater. *Wil. orn.* 216. *Raii ſyn. av.* 79.
La Fauvette, curruca. *Briſſon av.* III. 372.
Beccafico cinerizio. *Zinan.* 44.
Motacilla Hippolais. M. vireſcente cinerea ſubtus flaveſcens abdomine albido, artubus fuſcis, ſuperciliis albidis. *Lin. ſyſt.* 330. *Faun. Suec. ſp.* 248.
Braune graſs-mucke, Kleiner ſpott-vogel. *Kram.* 377.

149. PETTY-CHAPS.

THIS ſpecies is inferior in ſize to the former. The inſide of the mouth is red: the head, neck, back and wings are of an olivaceous aſh-color: the quil-feathers darker, edged with olive: the inner coverts of the wings yellow: the breaſt white, tinged with yellow: the belly of a ſilvery white: the tail duſky: the legs bluiſh.

Mr. *Willughby* ſays, this bird is found in *Yorkſhire*, and called the *Beam-bird*, from its neſting under beams in out-buildings, &c.

150. HEDGE.

Le petit Mouchet. *Belon av.* 375.
Potamida, *obſ.* 12.
Paſſer ſepium *Angl. Aldr. av.* II. 329.
Curruca *Eliotæ* (Zaunſchlipfle). *Geſner av.* 371.
*Wil. orn.* 215.
*Raii ſyn. av.* 79.
La Favette de haye, ou la paſſe buſe. Curruca ſepiaria. *Briſſon av.* III. 394.
Jarnſparf. *Faun. Suec. ſp.* 245.
Motacilla, Modularis. *Lin. ſyſt.* 329.
Braunflekkige Graſmücke (Brown ſpotted Petty-chaps.) *Friſch*, I. 21.
*Br. Zool.* plate S. 1. f. 3. 4.

DESCRIP.

THIS bird weighs twelve drams. Its head is of a deep brown, mixed with aſh color, the cheeks marked with oblong ſpots of dirty white: the back and coverts of the wings are duſky, edged with reddiſh brown: the quil-feathers and tail duſky: the rump brown, tinged with green: the throat and breaſt are of a dull aſh color: the belly of a dirty white: the ſides, thighs, and vent-feathers are of a pale tawny brown: the legs of a dull fleſh color.

This bird frequents low hedges, eſpecially thoſe of gardens. It makes its neſt in ſome ſmall buſh, and lays four or five eggs of a fine pale blue color: during the breeding ſeaſon has a remarkable flirt with its wings. The male has a ſhort but very ſweet plaintive note, which it begins with the firſt froſty mornings, and continues till a little time in the ſpring. This is the *Motacilla Modularis* of *Linnæus*; the bird which he ſuppoſes to be our hedge ſparrow, and deſcribes under the title of *Motacilla curruca*,* differs in colors of plumage as well as eggs.

*Faun. Suec. ſp.* 247.

Choſti,

Chofti, ou Chanteur. *Belon av.* 344.
Trochilus. *Geſner av.* 726.
Aſilus. *Aldr. av.* II. 293.
Little yellowiſh Bird. *Wil. orn.* 228. *Raii ſyn. av.* 80. *Edw. av.* 278.
Schnee Rienig (Snow king). *Friſch,* I. 24.
Schmittl. *Kram.* 378.
Le Pouillot, ou chantre. Aſilus. *Briſſon av.* III. 479.
Motacilla trochilus. *Lin. ſyſt.* 338. *Scopoli,* No. 238. *Faun. Suec. ſp.* 264.
Spurre-Konge, Fager-Fiis. *Br.* 286. *Br. Zool.* 101. plate S. f. 2. S. 2. f. 1.

151. YELLOW

THE yellow wren frequents large moiſt woods, and places where willow trees abound from which it takes one of its names. Its weight is about two drams. The color of the whole upper part of the body is a duſky green: the wings and tail are brown, edged with yellowiſh green: above each eye is a yellowiſh ſtroke; the breaſt, belly, and thighs vary in their color in different birds; in ſome are of a bright yellow, in others it fades almoſt into white. DESCRIP.

It builds in hollows in the ſides of ditches, making its neſt in the form of an egg; with a large hole at the top, as an entrance: the outſide is compoſed of moſs and hay, the inſide lined with ſoft feathers. It lays commonly ſeven white eggs, marked with numerous ſmall ruſt colored ſpots. It has a low plaintive note; and is perpetually creeping up and down the bodies and boughs of trees.

152. Scotch

WITH forehead and underſide of the body of a fine pale yellow: wings of the ſame color: back and tail of a pale brown. Communicated by Mr. *Latham* of *Dartford*, who thought that it was ſhot in the Highlands of *Scotland*. It was of the ſize of a wren.

153. Golden Crested.

La Soulcie. *Belon av.* 345.
Tettigon. *obſ.* 12.
Regulus. *Geſner av.* 727.
Fior rancio. *Olina*, 6.
*Aldr. av.* II. 290.
*Wil. orn.* 227.
*Raii ſyn. av.* 79.
*Edw. av.* 254.
*Cat. Carol. app.* 36, 37.
Kratlich. *Scopoli*, No. 240.
Le Poul, ou Souci, ou Roitelet hupé, Calendula. *Briſſon av.* III. 579.
Motacilla regulus. *Lin. ſyſt.* 338.
Kongsfogel. *Faun. Suec. ſp.* 262.
Sommer Zaunkoenig (Summer Wren). *Friſch*, I. 24.
Goldhannel. *Kram.* 378.
Fugle-Konge. *Br.* 285.
*Br. Zool.* 101. plate S. f. 3.

Descrip.

THIS is the leſt of the *Britiſh* birds, weighing only ſeventy-ſix grains. Its length is three inches and a half; the breadth five inches: it may readily be diſtinguiſhed from all other birds, not only by its ſize, but by the beautiful ſcarlet mark on the head, bounded on each ſide by a fine yellow line. The bill is duſky: the feathers of the forehead are green: from the bill to the eyes is a narrow white line: the back and the hind part of the neck are of a dull green: the coverts of the wings dusky, edged with green and tipt with white: the quil-feathers and tail dusky, edged with pale green. The throat and lower part of the body white, tinged with green: the legs dull yellow: the claws very long. It frequents

frequents woods, and is found principally in oak trees. Though ſo ſmall a bird it indures our winters, for we have frequently ſeen it later than *Chriſtmas*. It is ſeen in autumn as far north as the *Shetland Iſles*, but quits the country before winter; a vaſt flight for ſo minute and delicate a bird.

We have obſerved this bird ſuſpended in the air for a conſiderble time over a buſh in flower, whilſt it ſung very melodiouſly. The note does not much differ from that of the common wren, but is very weak.

Roytelet, Bœuf de Dieu, & Berichot. *Belon av.* 343.
Trilato, *obſ.* 12.
Paſſer troglodytes. *Geſner av.* 651. *Aldr. av.* II. 292.
Reatino. *Olina*, 6. *Wil. orn.* 229. *Raii ſyn. av.* 80.
Streſch; Storſchek. *Scopoli*, No. 239.
Le Roitelet, Regulus. *Briſſon av.* III. 425.
Motacilla troglodytes. *Lin. ſyſt.* 337. *Faun. Suec. ſp.* 261.
Nelle-Konge. *Brunnich*, 284.
Schneekoning, Konickerl, Zaunſchlupfrel. *Kram.* 378.
Schneekoenig (Snow king). *Friſch*, I. 24. *Br. Zool.* 102.

154. WREN.

THE wren may be placed among the fineſt of our ſinging birds. It continues its ſong throughout the winter, excepting during the froſts. It makes its neſt in a very curious manner; of an oval ſhape, very deep, with a ſmall hole in the middle for ingreſs and egreſs: the external material is moſs, within it is lined with hair and feathers. It lays from ten to eighteen eggs; and as often brings up as many young; which, as Mr. *Ray* obſerves, may be ranked among thoſe daily miracles that we take no notice of; that it ſhould feed ſuch a number without paſſing over one, and that too in utter darkneſs.

DESCRIP. The head and upper part of the body of the wren are of a deep reddiſh brown: above each eye is a ſtroke of white: the back, and coverts of the wings, and tail, are marked with ſlender tranſverſe black lines: the quil-feathers with bars of black and red. The throat is of a yellowiſh white. The belly and ſides croſſed with narrow duſky and pale reddiſh brown lines. The tail is croſſed with duſky bars.

155. SEDGE.

Willow Lark, *Br. Zool.* II. 241.
Sedge Bird. *Br. Zool.* IV. *tab.* X.
Leſſer Reed Sparrow. *Wil. orn.* 144.
Paſſer arundinaceus minor. *Raii ſyn. av.* 47.
Motacilla ſalicaria. *Lin. ſyſt.* 330. *Faun. Suec.* No. 249.
La fauvette Babillarde. *Briſſon av.* III. 384.

THIS ſpecies is of a ſlender elegant form: the bill black: the head brown, marked with duſky ſtreaks: over each eye a line of pure white, over that another of black: cheeks brown: throat, breaſt, and belly white; the two laſt tinged with yellow: hind part of the neck and back of a reddiſh brown: the back ſpotted with black: coverts of the tail tawny: coverts of the wings duſky, edged with pale brown: quil-feathers duſky: tail brown, cuneiform: forming a circle when ſpread: legs duſky.

It is a moſt entertaining polyglot, or mocking bird; ſitting concealed in willows or reeds; in a pleaſing but rather hurrying manner, it imitates the ſwallow, the ſky-lark, the houſe-ſparrow, *&c.* ſings all night, and ſeems to leave us before winter.

Tit-lark,

Tit-lark, that ſings like a Graſshopper. *Wil. orn.* 209.
Alauda minima locuſtæ voce. Locuſtella D. *Johnſon.*
*Raii ſyn. av.* 70.
*Ray's Letters*, 108.
Alauda ſepiaria, L'Alouette de Buiſſon. *Briſſon av.* III. 347.
Piep Lerche (Chirping Lark). *Friſch.* I. 16.
Alauda trivalis. *Lin. ſyſt.* 288.
*Br. Zool.* 95. plate Q. f. 5.

156. GRASSHOPPER.

THIS bird was received out of *Shropſhire:* it is the ſame with that Mr. *Ray* deſcribes as having the note of the graſshopper, but louder and ſhriller. It is a moſt artful bird, will ſculk in the middle, and thickeſt part of the hedge, and will keep running along for a hundred yards together, nor can it be forced out but with the greateſt difficulty: it is from this covert that it emits its note, which ſo much reſembles the inſect, from which it derives its name, as generally to be miſtaken for it. In the height of ſummer it chirps the whole night: its ſibilous note is obſerved to ceaſe about the latter end of *July*.

DESCRIP.

The bill is very ſlender, of a duſky color: the head, and whole upper part of the body is of a greeniſh brown, ſpotted with black: the quil-feathers duſky, edged with an olive brown: the tail is very long, compoſed of twelve ſharp pointed feathers; the two middlemoſt are the longeſt, the others on each ſide grow gradually ſhorter. The under ſide of the body is of a dull yellowiſh white, darkeſt about the breaſt: the legs are of a dirty white: the hind claw ſhorter, and more crooked, than is uſual in the lark kind.

** With party colored Tails.

157. WHEAT-EAR.

*Belon av.* 352.
Oenanthe. *Geſner av.* 629.
*Aldr. av.* II. 332.
Wheat-ear, Fallow-ſmich, White-tail. *Wil. orn.* 233.
*Raii ſyn. av.* 75.
Motacilla oenanthe. *Lin. ſyſt.* 332.
Stenſquetta. *Faun. Suec. ſp.* 254.
Le Cul blanc, Vitrec, ou Moteux, Vitiflora. *Briſſon av.* III. 449.
Culo bianco, Fornarola, Petragnola. *Zinan.* 41.
*Norvegis*, Steendolp, Steen Squette, Steengylpe. *Brunnich*, 276.
Steinſchwaker, Steinſchnapperl. *Kram.* 374.
Bella. *Scopoli*, No. 230.
*Br. Zool.* 102. plate S. 1. f. 5. 6.

THE wheat-ear begins to viſit us about the middle of *March*, and continues coming till the beginning of *May:* we have obſerved that the females arrive about a fortnight before the males. They frequent warrens, downs, and the edges of hills, eſpecially thoſe that are fenced with ſtone walls. They breed in the latter, in old rabbet burrows, cliffs, and frequently under old timber: their neſt is large, made of dried graſs, rabbet's down, a few feathers, and horſe hair: and they lay from ſix to eight eggs, of a light blue color.

They grow very fat in autumn, and are eſteemed a delicacy. About *Eaſtbourn* in *Suſſex* they are taken by the ſhepherds in great numbers, in ſnares made of horſe hair, placed under a long turf; being very timid birds, the motion of a cloud, or the appearance of a hawk, will drive them for ſhelter into thoſe traps, and ſo they are taken. The numbers annually enſnared in that diſtrict alone, amount to about 1840 dozen, which ſell uſually at ſix-pence *per* dozen;

dozen; and what appears very extraordinary, the numbers that return the following year do not appear to be leſſened; as we are aſſured by a very intelligent perſon reſident near that place. The reaſon that ſuch a quantity are taken in the neighbourhood of *Eaſtbourn* is, that it abounds with a certain *fly* which frequents the adjacent hills, for the ſake of the wild thyme they are covered with, which is not only a favorite food of that inſect, but the plant on which it depoſites its eggs?

*Wheat-ears* are much fatter in a rainy ſeaſon than a dry one, for they not only feed on inſects, but on earth worms, which come out of the ground in greater numbers in wet weather than in dry.

DESCRIP. The head and back of the male are of a light grey, tinged with red: over each eye is a white line; beneath that is a broad black ſtroke, paſſing acroſs each eye to the hind part of the head: the rump and lower half of the tail are white; the upper half black: the under ſide of the body is white, tinged with yellow; on the neck it inclines to red: the quil-feathers are black, edged with reddiſh brown. The colors of the female are more dull: it wants that black ſtroke acroſs the eyes, and the bar of white on the tail is narrower. Theſe birds diſappear in *September*, at leſt from the northern parts of this kingdom; but in *Hampſhire* many of them continue the whole winter.

158. WHIN-CHAT.

Le Tarier. *Belon av.* 361.
Rubetra. *Geſner av.* 729.
Le grand Traquet, ou le Tarier. *Briſſon av.* III. 432. *tab.* 24. *fig.* 1. the Male.
*Wil. orn.* 234.
*Raii ſyn. av.* 76.
Motacilla rubetra. *Lin. ſyſt.* 332. *Faun. Suec. ſp.* 255. *Scopoli*, No. 237.
Geſtettenſchlager. *Kram.* 375.
Groſſer Fliegenfuenger (great Fly-catcher). *Friſch*, I. 22.
*Br. Zool.* 103. plate S. 2. f. 3. 4.

THIS is in the north of *England*, alſo a bird of paſſage: but we are not certain whether it quits this iſland, but are rather inclined to think it only ſhifts its quarters: in the ſouth it continues the whole year.

DESCRIP. The head and back are of a pale reddiſh brown, regularly ſpotted with black: over each eye is a narrow white ſtroke, beneath that is a broad bed of black, which extends from the bill to the hind part of the head: the breaſt is of a reddiſh yellow: the belly paler: the quil-feathers are brown, edged with a yellowiſh brown: the upper part of the wing is marked with two white ſpots: the lower part of the tail is white, the two middle feathers excepted, which are wholly black: the upper part of the others are of the ſame color.

The colors of the female are far leſs agreeable: in lieu of the white and black marks on the cheeks, is one broad pale brown one: and the white on the wings is in far leſs quantity than that of the male.

Le Traquet ou Groulard. *Belon av.* 360.
Rubetra. *Aldr. av.* II. 325.
Stone-ſmich, Stone-chatter, or Moor-titling. *Wil. orn.* 235.
*Raii ſyn. av.* 76.
Le Traquet, Rubetra. *Briſſon av.* III. 428. *tab.* 23. *fig.* 1. The Male.
Pontza. *Scopoli*, No. 236.
Occhio di bue. *Zinan.* 52.
Motacilla rubicola. *Lin. ſyſt.* 332.
Criſtofſil. *Kram.* 375.
*Br. Zool.* 103. plate S. 2. f. 5, 6.

159. STONE-CHATTER.

THIS ſpecies is common during ſummer, in gorſy grounds. In the winter they diſperſe into marſhes, and other places; but do not quit the iſland. It is a reſtleſs and noiſy bird, and perches frequently on ſome buſh, chattering inceſſantly. The head, neck, and throat are black; but on both ſides the latter is a white bar, ſo that it appears on firſt ſight to be encircled with white: the feathers on the back are black edged with tawny: the lower part of the back juſt above the rump is white: the end and exterior ſide of the two outmoſt feathers of the tail are of a pale ruſt-color, the reſt are black: the breaſt is of a deep reddiſh yellow; the belly of a lighter hue: the quil-feathers are duſky edged with dull red; thoſe next the body are marked with a white ſpot near their bottoms: the coverts of the wings are adorned with another. The head of the female is ferruginous ſpotted with black; and the colors in general leſs vivid. In both ſexes the legs are black; which alſo is the character of the two preceding ſpecies, as well as that next to be deſcribed.

DESCRIP.

*Wil.*

160. WHITE-THROAT.

*Wil. orn.* 236.
*Raii ſyn. av.* 77.
La Meſange cendrée, Parus cinereus. *Briſſon av.* III. 549.
Motacilla ſylvia? *Lin. ſyſt.* 330.
Kogſnetter, Meſar. *Faun. Suec. ſp.* 250.
*Br. Zool.* 104. plate S. f. 4.

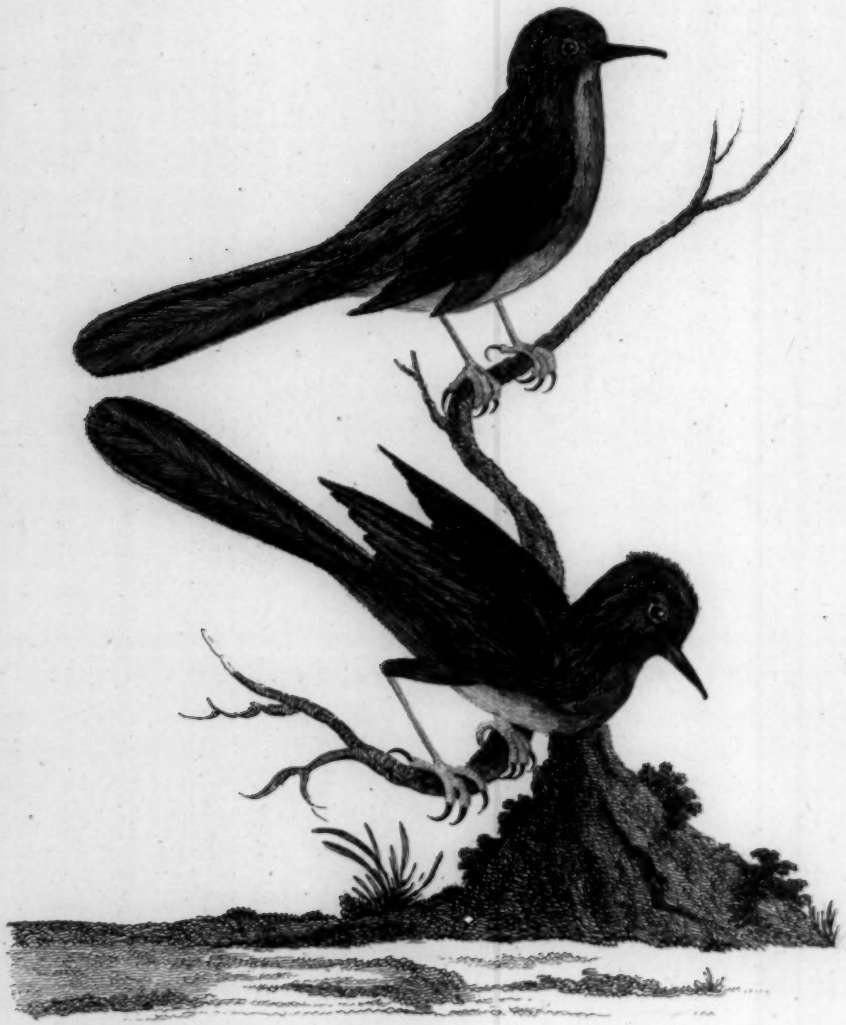
THIS frequents our gardens in the ſummer time; in the winter it leaves us. It builds in low buſhes near the ground, making its neſt externally of the tender ſtalks of herbs and dry ſtraw; the middle part of fine bents and ſoft graſs, the inſide of hair. It lays five eggs of a whitiſh green color, ſprinkled with black ſpots*. Its note is continually repeated, and often attended with odd geſticulations of the wings: is harſh and diſpleaſing: is a ſhy and wild bird, avoiding the haunt of man; ſeems of a pugnatious diſpoſition, ſinging with an erected creſt, and in attitudes of defiance.

DESCRIP. The head of this bird is of a browniſh aſh-color, the throat white: the breaſt and belly white tinged with red; (in the female wholly white:) the back inclines to red: the leſſer coverts of the wings are of a pale brown; the greater duſky, edged with tawny brown; the quil-feathers duſky, edged with reddiſh brown; the tail the ſame, except the upper part of the interior ſide and whole exterior ſide of the outmoſt feather, which are white: the legs are of a yellowiſh brown.

* *Wil. orn.*

W. WITH

# DARTFORD WARBLER.



161. DARTFORD.

W. WITH reddiſh *irides:* eye-lids deep crimſon. A ſlender bill a little curved at the point: whole upper part of the head, neck, and back, of a duſky brown tinged with a dull yellow: throat, under ſide of the neck, the breaſt and belly deep ferruginous; the middle of the belly white; quil-feathers duſky edged with white: baſtard wing white: exterior ſide of the interior feather of the tail white, the reſt duſky; and long in proportion to the ſize of the bird: legs yellow.

A pair of theſe were ſhot on a common near *Dartford*, in *April* 1773, and communicated to me by Mr. *Latham*; they fed on flies, which they ſprung on from the furze buſh they ſat on, and then returned to it again.

XXV. TIT-MOUSE.

BILL ſtrait, ſhort, hard, ſtrong, ſharp-pointed, a little compreſſed.

NOSTRILS round covered with briſtles.

TONGUE as if cut at the end, terminating with two or three briſtles.

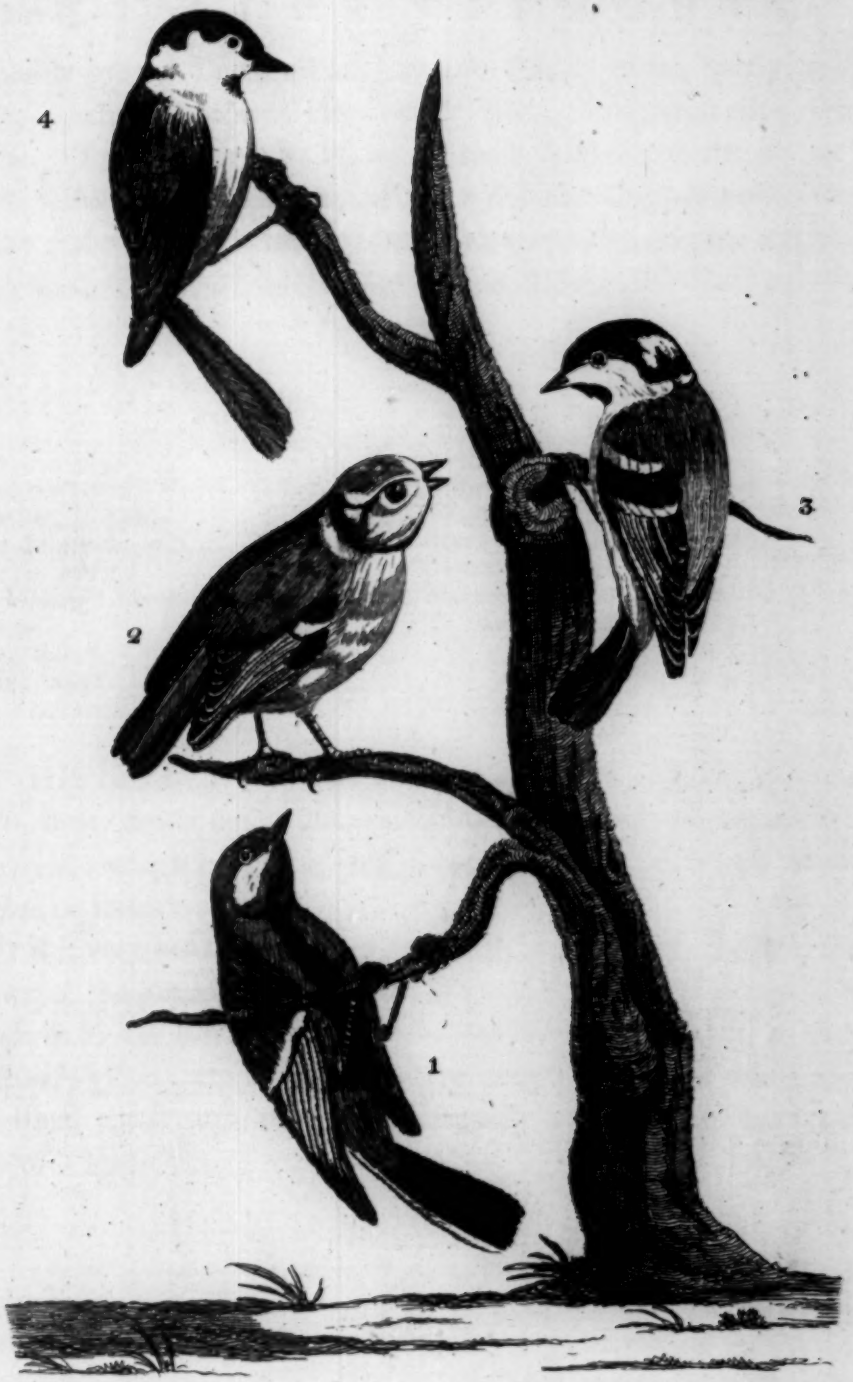
162. GREAT.

Nonette ou Meſange. *Belon av.* 376.
Parus major. *Geſner av.* 640. *Aldr. av.* II. 319.
Spernuzzola, Paruſſola. *Olina*, 28.
Great Titmouſe, or Ox-eye. *Wil. orn.* 240.
*Raii ſyn. av.* 73.
Snitza. *Scopoli*, No. 242.
*Lin. ſyſt.* 341.
Talg-oxe. *Faun. Suec. ſp.* 265.
Le groſſe Meſange, ou la Charbonniere. *Briſſon av.* III. 539.
*Pl. Enl.* 3. f. 1.
Muſvit. *Brunnich*, 287.
Kohlmeiſe. *Kram.* 378. *Friſch*, I. 13.
*Br. Zool.* 113. plate W. f. 4.

THIS ſpecies ſometimes viſits our gardens; but chiefly inhabits woods, where it builds in hollow trees, laying about ten eggs. This, and the whole tribe feed on inſects, which they find in the bark of trees; in the ſpring they do a great deal of miſchief in the fruit garden, by picking off the tender buds. Like wood-peckers they are perpetually running up and down the bodies of trees in queſt of food. The bird has three chearful notes, which it begins to utter in the month of *February*.

DESCRIP. The head and throat of this ſpecies are black; the cheeks white; the back green; the belly of a yellowiſh green, divided in the middle by a bed of black, which extends to the vent; the rump is of a bluiſh

1 GREAT, 2 BLUE, 3 COLE, 4 MARSH TITMOUSE.



a bluiſh grey. The quil-feathers are duſky, edged partly with blue, partly with white: the coverts blue; the greater tipt with white. The exterior ſides of the outmoſt feathers of the tail are white: the exterior ſides of the other bluiſh: their interior ſides duſky: the legs lead color. Toes divided to the origin; and the back toe of the whole genus very large and ſtrong.

*Belon av.* 369.
Parus cœruleus. *Geſner av.* 641.
*Aldr. av.* II 321.
Blue Titmouſe, or Nun. *Wil. orn.* 242.
*Raii ſyn. av.* 74.
La Meſange Bleue. *Briſſon av.* III. 544.
Blava ſnitza, Blau mandlitz. *Scopoli*, No. 244.
*Pl. Enl.* 3. f. 2.
Parozolino, o Fratino. *Zinan.* 76.
*Lin. ſyſt.* 341.
Blamees. *Faun. Suec. ſp.* 267.
Blaaemeiſe. *Br.* 288.
Blaumeiſe. *Kram.* 379. *Friſch*, I. 14. *Br. Zool.* 114. plate W. f. 5.

163. BLUE.

THIS bird frequents gardens, and does great injury to fruit trees, by bruiſing the young buds in ſearch of the inſects that lurk under them; it breeds in holes of walls, and lays about twelve or fourteen eggs.

DESCRIP. It is a very beautiful ſpecies, the bill is ſhort and duſky: the crown of the head of a fine blue: from the bill to the eyes is a black line: the forehead and cheeks are white: the back is of a yellowiſh green: the lower ſide of the body yellow: the wings and tail blue, the former marked tranſverſely with a white bar: the legs of a lead color.

164. Cole. Quatrieſme eſpece de Meſange. *Belon av.* 370.
Parus ater. *Geſner av.* 641.
*Aldr. av.* II. 321.
*Wil. orn.* 241.
*Raii ſyn. av.* 73.
Speermieſe, Creuzmeiſe. *Kram.* 379.
Tannen Meiſe (Pine Titmouſe) *Friſch*, I. 13.
La Meſange a teſte noire, Parus atricapillus. *Briſſon av.* III. 551.
*Cat. Carol. app.* 37.
P. ater. *Lin. ſyſt.* 341.
*Faun. Suec. ſp.* 268. *Scopoli*, No. 245.
*Br. Zool.* 114.

Descrip. THE head of the colemouſe is black, marked on the hind part with a white ſpot; the back is of a greeniſh grey; the rump more green; the tail and wings duſky; the exterior feathers edged with green; the coverts of the wings are of a duſky green; the loweſt tipt with white. For a farther account we beg leave to refer to the next deſcription.

165. Marsh. Parus paluſtris. *Geſner av.* 641.
Paronzino. *Aldr. av.* II. 32.
Marſh Titmouſe, or Black-cap. *Wil. orn.*
*Raii ſyn. av.* 73.
Frattino paluſtre. *Zinan.* 77.
La Meſange de Marais ou la Nonette cendrée. *Briſſon av.* III. 555.
*Pl. enl.* 3. f. 3.
*Lin. ſyn.* 341.
Entita, Tomlinge. *Faun. Suec. ſp.* 269. *Scopoli*, No. 246.
Aſch Meiſe (Aſh Titmouſe) *Friſch*, I. 13.
Hundſmeiſe. *Kram.* 379.
*Norvegis* Graae-Meiſe. *Brunnich.* 190.
*Br. Zool.* 114. plate W. f. 3.

THIS ſpecies is called by *Geſner* the marſh tit-mouſe; becauſe it frequents wet places. With us they inhabit woods, with the laſt kind; and ſeldom infeſt our gardens: early in *February* it emits two notes, not unlike the whetting of a ſaw.

Mr.

Mr. *Willughby* obſerves, that this bird differs from the former in theſe particulars, 1ſt, that it is bigger: 2d, that it wants the white ſpot on the head: 3d, it has a larger tail: 4th, its under ſide is white: 5th, it has leſs black under the chin: 6th, it wants the white ſpot on the coverts of the wings. This laſt diſtinction does not hold in general, as the ſubject figured in the *Britiſh Zoology* had thoſe ſpots; yet wanted that on the hind part of the head.

*Belon av.* 368.
Parus caudatus. *Geſner av.* 642.
Monticola. *Alar av.* II. 319.
*Wil. orn.* 242.
*Raii ſyn. av.* 74.
Pendolino, Paronzino. *Zinan.* 77.
Gaugartza. *Scopoli*, No. 247.
La Meſange a longue queue, Parus longicaudus. *Briſſon av.* III. 570.
*Lin. ſyſt.* 342.
Alhtita. *Faun. Suec. ſp.* 83.
Belzmeiſe Pfannenſtiel. *Kram.* 379.
Langſchwaentzige Meiſe. *Friſch*, I. 14.

166. LONG TAILED.

THE length is five inches and a quarter; the breadth ſeven inches. The bill is black, very ſhort, thick, and very convex, differing greatly from all others of the titmouſe kind: the baſe is beſet with ſmall briſtles: the irides are of a hazel color. The top of the head, from the bill to the hind part, is white, mixed with a few dark grey feathers; this bed of white is entirely ſurrounded with a broad ſtroke of black, which, riſing on each ſide the upper mandible, paſſes over each eye, unites at the hind part of the head; and continues along the middle of the back to the rump: the feathers on each ſide of this black ſtroke are of a purpliſh red, as are thoſe immediately incumbent on the tail. The covert feathers of the wings are black: the ſecondary and quill-feathers

DESCRIP.

feathers are duſky, the largeſt of the latter are wholly ſo; the leſſer and more remote have their exterior ſides edged with white.

The tail is the longeſt in proportion to the bulk of any *Britiſh* bird, being in length three inches; the form of it is like that of a magpie, conſiſting of twelve feathers of unequal lengths, the middlemoſt the longeſt, thoſe on each ſide growing gradually ſhorter; the exterior ſides, and the top of the interior ſides of the three outmoſt feathers are white; the reſt of the tail black. The cheeks and throat are white: the breaſt and whole under ſide white, with a caſt of red. The legs, feet, and claws are black.

It forms its neſt with great elegance, of an oval ſhape, and about eight inches deep; near the upper end is a hole for admiſſion: the external materials are moſſes and lichens, curiouſly interwoven with wool; within it is lined very warmly with a thick bed of feathers: it lays from ten to ſeventeen eggs. The young follow the parents the whole winter; and from the ſlimneſs of their bodies, and great length of tail, appear, while flying, like ſo many darts cutting the air. They are often ſeen paſſing through our gardens, going progreſſively from tree to tree, as if in their road to ſome other place, never making any halt.

Left Butcher Bird.] *Edw. av.* 55.
Bearded Titmouſe. *Aldr. av.* I. *tab.* 48. *Scopoli*, No. 241.
La meſange barbue, ou le mouſtache, Parus barbatus. *Briſſon av.* III. 567.
Parus biarmicus. *Lin. ſyſt.* 342. *Br. Zool.* 74 plate C. 2.
Left Butcher Bird. *Br. Zool.* Ed. 2d. I. 165.

167. BEARDED.

THIS ſpecies is found in the marſhes near *London:* we have ſeen it near *Glouceſter*; it is alſo frequent among the great tracts of reeds near *Cowbit* in *Lincolnſhire*, where I ſuſpect they breed. It is of the ſame ſhape as the long tailed titmouſe, but rather larger. The bill is ſhort, ſtrong, and very convex; of a box color: *irides* pale yellow: the head is of a fine grey: on each ſide of the bill, beneath the eye, is a long triangular tuft of black feathers: the chin and throat are white: the middle of the breaſt fleſh colored: the ſides and thighs of a pale orange: the hind part of the neck and the back are of an orange bay: the ſecondary feathers of the wings are black edged with orange: the quil-feathers duſky on their exterior, white on their interior ſides: the leſſer quil-feathers tipt with orange. The tail is two inches three quarters long: the two middle feathers of the tail are largeſt, the others gradually ſhorten on each ſide; the outmoſt of which are of a deep orange color. The vent-feathers of the male of a pale black: of the female of a dull orange. The legs are of a deep ſhining black.

DESCRIP.

The *female* wants the black mark on each cheek, and the fine fleſh color on the breaſt: the crown of the head is of a browniſh ruſt color, ſpotted with black: the outmoſt feathers of the tail are black tipt with white.

FEMALE.

Short

XXVI. SWALLOW.

Short weak BILLS.
Very wide MOUTHS.
Short weak LEGS.

168. CHIMNY.

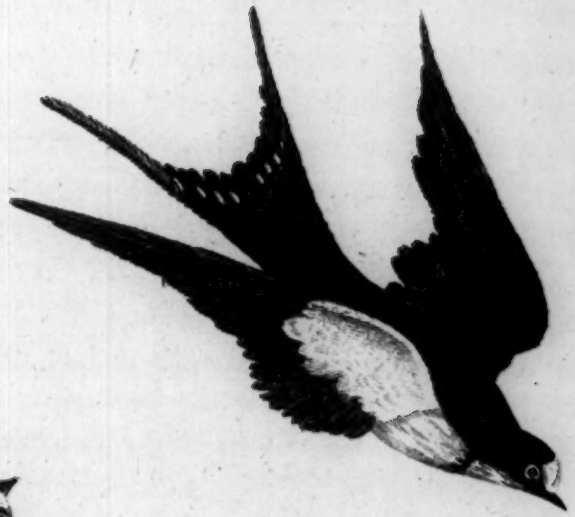
La petite Hirondelle. *Belon av.* 378.
Hirundo domeſtica. *Geſner av.* 548. *Aldr. av.* II. 294.
Houſe or Chimney Swallow. *Wil. orn.* 212.
*Raii ſyn. av.* 71.
Rondone. *Zinan.* 47.
L' Hirondelle de Cheminée. *Briſſon av.* II. 486.
Hirundo ruſtica. *Lin. ſyſt.* 343.
Ladu-Swala. *Faun. Suec. ſp.* 270.
Forſtue-Svale, Mark-Svale. *Brunnich,* 289.
Haus-Schwalbe. *Friſch,* I. 17.
Hauſs Schwalbe. *Kram.* 380. *Br. Zool.* 96.
Lauſtaza. *Scopoli,* No. 249.

THIS ſpecies appears in *Great Britain* near twenty days before the martin, or any other of the ſwallow tribe. They leave us the latter end of *September*; and for a few days previous to their departure, they aſſemble in vaſt flocks on houſe tops, churches, and even trees, from whence they take their flight. It is now known that ſwallows take their winter quarters in *Senegal*, and poſſibly they may be found along the whole *Morocco* ſhore. We are indebted to M. *Adanſon** for this diſcovery, who firſt obſerved them in the month of *October*, after their migration out of *Europe*, on the ſhores of that kingdom: but whether it was this ſpecies alone, or all the *European* kinds, he is ſilent.

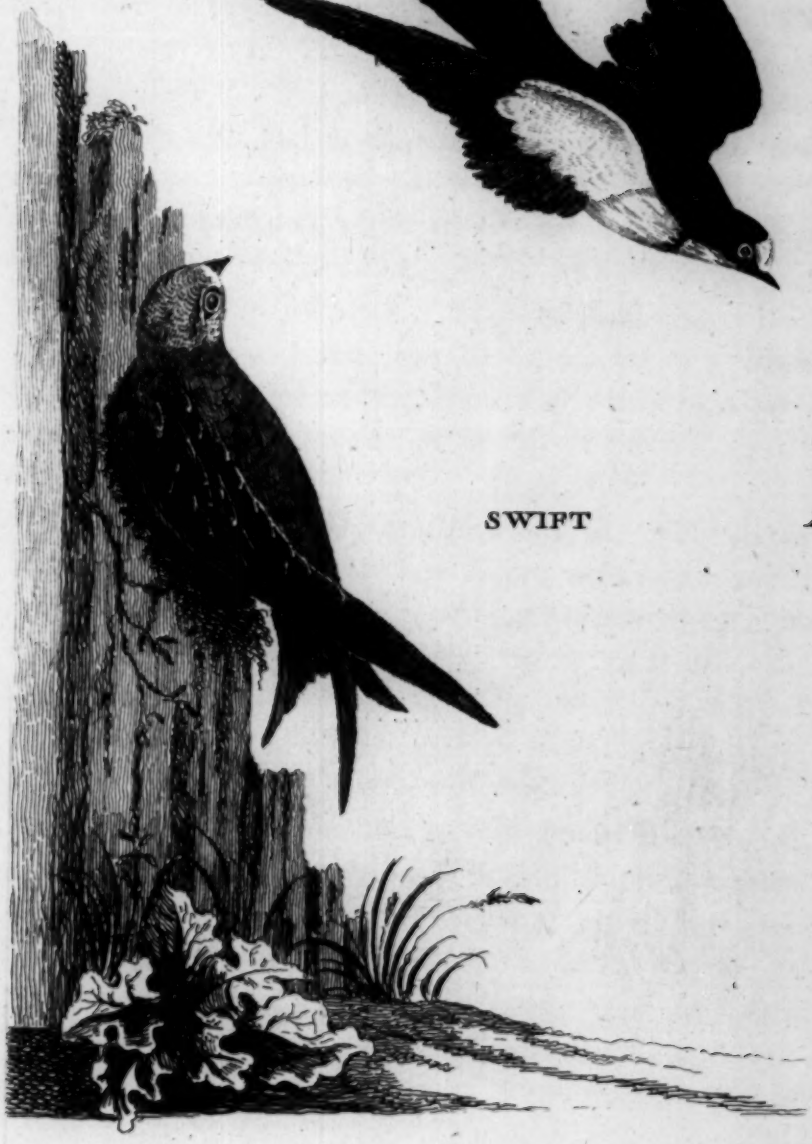
* Voyage to *Senegal*, p. 121. 163.

The

SWALLOW. *N°. 168*



SWIFT *N°. 171*



The name of chimny ſwallow may almoſt be confined to *Great Britain*, for in ſeveral other countries they chuſe different places for their neſts. In *Sweden*, they prefer barns, ſo are ſtyled there *Ladu-Swala*, or the barn ſwallow: and in the hotter climates, they make their neſts in porches, gateways, galleries, and open halls.

The houſe ſwallow is diſtinguiſhed from all others by the ſuperior forkineſs of its tail, and by the red ſpot on the forehead, and under the chin.

DESCRIP. The crown of the head, the whole upper part of the body, and the coverts of the wings are black, gloſſed with a rich purpliſh blue, moſt reſplendent in the male: the breaſt and belly white, that of the male tinged with red: the tail black; the two middle feathers plain: the others marked tranſverſely near their ends with a white ſpot. The exterior feathers of the tail are much longer in the male than in the female.

Its food is the ſame with the others of its kind, viz. inſects; for the taking of which in their ſwifteſt flight, nature hath admirably contrived their ſeveral parts; their mouths are very wide to take in flies, &c. in their quickeſt motion; their wings are long, and adapted for diſtant and continual flight; and their tails are forked, to enable them to turn the readier in purſuit of their prey. This ſpecies, in our country, builds in chimnys, and makes its neſt of clay mixed with ſtraw, leaving the top quite open. It lines the bottom with feathers and graſſes: and uſually lays from four to ſix eggs, white ſpeckled with red; but by taking away one of the eggs daily, it will ſucceſſively lay as far as nineteen, as Doctor *Liſter* has experienced. It breeds earlier than any other ſpecies. The firſt brood are obſerved to quit the neſt the laſt week

in *June*, or the firſt in *July*: the laſt brood towards the middle or end of *Auguſt*. The neſt being fixed five or ſix feet deep within the chimny, it is with difficulty that the young can emerge. They even ſometimes fall into the rooms below: but as ſoon as they ſucceed, they perch for a few days on the chimny top, and are there fed by their parents. Their next eſſay is to reach ſome leafleſs bough, where they ſit in rows, and receive their food. Soon after they take to the wing, but ſtill want ſkill to take their own prey. They hover near the place where their parents are in chaſe of flies, attend their motions, meet them, and receive from their mouths the offered ſuſtenance.

It has a ſweet note, which it emits in *Auguſt* and *September*, perching on houſe tops.

169. MARTIN.

Le Martinet. *Belon av.* 380.
Hirundo ſylveſtris. *Geſner av.* 564. *Friſch*, I. 17. *Aldr. av.* II. 311.
Martin, Martlet, or Martinet. *Will. orn.* 213. *Raii ſyn. av.* 71.
Rondone minore, e Graſſolo. *Zinan.* 48.
Huda urnik. *Scopoli*, No. 250.
La petite Hirondelle, ou le Martinet a cul blanc. *Briſſon av.* II. 490.
Hirundo urbica. *Lin. ſyſt.* 344.
Hus-Swala. *Faun. Suec. ſp.* 271.
Speyerl. *Kram.* 380.
*Danis* Bye v. Tagſkicæg-Svale, *Langelandis*, Rive. *Br.* 290. *Br. Zool.* 96. plate Q. f. 2. *Ph. Tr.* 1774. p. 196.

DESCRIP.

THE *Martin* is inferior in ſize to the former, and its tail much leſs forked. The head and upper part of the body, except the rump, is black gloſſed with blue: the breaſt, belly and rump are white: the feet are covered with a ſhort white down. This is the ſecond of the ſwallow kind that appears in our country. It builds under the eaves of houſes, with the ſame materials, and in the ſame form as the houſe ſwallow, only its neſt is covered above, having

having only a ſmall hole for admittance. We have alſo ſeen this ſpecies build againſt the ſides of high cliffs over the ſea. For the time that the young keep the neſt, the old one feeds them, adhering by the claws to the outſide: but as ſoon as they quit it, feeds them flying, by a motion quick and almoſt imperceptible to thoſe who are not uſed to obſerve it.

It is a later breed than the preceding by ſome days: but both will lay twice in the ſeaſon; and the latter brood of this ſpecies have been obſerved to come forth ſo late as the eighteenth of *September*; yet that year (1766) they entirely quitted our ſight by the fifth of *October*; not but they ſometimes continue here much later: the martins and red wing thruſhes having been ſeen flying in view on the ſeventh of *November*. Neſtlings have been remarked in *Hampſhire* as late as the 21ſt. of *October*, 1772.

L' Hirondelle de rivage. *Belon av.* 379.
Hirundo riparia, ſeu Drepanis. *Geſner av.* 565.
Dardanelli. *Aldr. av.* II. 312.
Sand Martin, or Shore Bird. *Wil. orn.* 213.
*Raii ſyn. av.* 71.
L' Hirondelle de rivage. *Briſſon av.* II. 506.
*Cat. Carol. app.* 37.
Rondone riparia. *Zinan.* 49.
Hirundo riparia. *Lin. ſyſt.* 344.
Strand-ſwala, Back ſwala. *Faun. Suec. ſp.* 273.
*Danis* Dig-v. Jord-ſvale, Soil-bakke. *Norveg.* Sand Rænne. *Br.* 291.
Ufer-Schwalbe (Shore Swallow) *Friſch*, I. 18.
Geſtetten-ſchwalbe. *Kram.* 381.
*Br. Zool.* 97. plate Q. f. 1.

170. SAND.

THIS is the leſt of the genus that frequents *Great Britain*. The head and whole upper part of the body are mouſe colored: the throat white, encircled with a mouſe colored ring: the belly white: the feet ſmooth and black.

DESCRIP.

It builds in holes in ſand pits, and in the banks of rivers, penetrating ſome feet deep into the bank, boring through the ſoil in a wonderful manner with its feet, claws, and bill. It makes its neſt of hay, ſtraw, &c. and lines it with feathers: it lays five or ſix white eggs. It is the earlieſt of the ſwallow tribe in bringing out its young.

171. SWIFT.

La grande Hirondelle, Moutardier ou grand Martinet. *Belon av.* 377.
Apus. *Geſner av.* 166.
*Aldr. av.* II. 312.
Black Martin, or Swift. *Wil. orn.* 214.
*Raii ſyn. av.* 72.
Rondone. *Zinan.* 47.
Le Martinet. *Briſſon av.* II. 514.
Hirundo apus. *Lin ſyſt.* 344.
Ring-ſwala. *Faun. Suec. ſp.* 272.
Steen, Kirke-v. Sæe-Svale. *Br.* 292.
Speyer, groſſe thurn ſchwalbe. *Kram.* 380. *Scopoli*, No. 251.
*Br. Zool.* 97.

THIS ſpecies is the largeſt of our ſwallows; but the weight is moſt diſproportionately ſmall to its extent of wing of any bird; the former being ſcarce one ounce, the latter eighteen inches. The length near eight. The feet of this bird are ſo ſmall, that the action of walking and of riſing from the ground is extremely difficult; ſo that nature hath made it full amends, by furniſhing it with ample means for an eaſy and continual flight. It is more on the wing than any other ſwallows; its flight is more rapid, and that attended with a ſhrill ſcream. It reſts by clinging againſt ſome wall, or other apt body; from whence *Klein* ſtyles this ſpecies *Hirundo muraria.* It breeds under the eaves of houſes, in ſteeples, and other lofty buildings; makes its neſt of graſſes and feathers;

DESCRIP. and lays only two eggs, of a white color. It is entirely of a gloſſy dark ſooty color, only the chin is marked with a white ſpot: but by

by being ſo conſtantly expoſed to all weathers, the gloſs of the plumage is loſt before it retires. I cannot trace them to their winter quarters, unleſs in one inſtance of a pair found adhering by their claws and in a torpid ſtate, in *February* 1766, under the roof of *Longnor Chapel, Shropſhire:* on being brought to a fire, they revived and moved about the room. The feet are of a particular ſtructure, all the toes ſtanding forward; the leſt conſiſts of only one bone; the others of an equal number, viz. two each; in which they differ from thoſe of all other birds.

This appears in our country about fourteen days later than the ſand martin; but differs greatly in the time of its departure, retiring invariably about the tenth of *Auguſt*, being the firſt of the genus that leaves us.

The fabulous hiſtory of the *Manucodiata*, or bird of *Paradiſe*, is in the hiſtory of this ſpecies in great meaſure verified. It was believed to have no feet, to live upon the celeſtial dew, to float perpetually on the *Indian*, and to perform all its functions in that element.

The SWIFT actually performs what has been in theſe enlightened times diſproved of the former; except the ſmall time it takes in ſleeping, and what it devotes to incubation, every other action is done on wing. The materials of its neſt it collects either as they are carried about by the winds, or picks them up from the ſurface in its ſweeping flight. Its food is undeniably the inſects that fill the air. Its drink is taken in tranſient ſips from the water's ſurface. Even its amorous rites are performed on high. Few perſons who have attended to them in a fine ſummer's morning, but muſt have ſeen them make their aerial courſes at a great height, encircling a certain ſpace with an eaſy ſteady motion. On a ſudden they

they fall into each other's embraces, then drop precipitate with a loud ſhriek for numbers of yards. This is the critical conjuncture, and to be no more wondered at, than that inſects (a familiar inſtance) ſhould diſcharge the ſame duty in the ſame element.

Theſe birds and ſwallows are inveterate enemies to hawks. The moment one appears, they attack him immediately: the ſwifts ſoon deſiſt; but the ſwallows purſue and perſecute thoſe rapacious birds, till they have entirely driven them away.

Swifts delight in ſultry thundry weather, and ſeem thence to receive freſh ſpirits. They fly in thoſe times in ſmall parties with particular violence; and as they paſs near ſteeples, towers, or any edifices where their mates perform the office of incubation, emit a loud ſcream, a ſort of ſerenade, as Mr. *White* ſuppoſes, to their reſpective females.

To the curious monographics on the ſwallow tribe, of that worthy correſpondent, I muſt acknowlege myſelf indebted for numbers of the remarks above-mentioned.

## OF THE DISAPPEARANCE OF SWALLOWS.

THERE are three opinions among naturaliſts concerning the manner the ſwallow tribes diſpoſe of themſelves after their diſappearance from the countries in which they make their ſummer reſidence. *Herodotus* mentions one ſpecies that reſides in *Egypt* the whole year: *Proſper Alpinus** aſſerts the ſame; and Mr. *Loten*,

* Hirundines duplicis generis ibi obſervantur; patriæ ſcilicet quæ nunquam ab *Ægypto* diſcedentes, ibi perpetuo morantur, atque peregrinæ, hæ ſunt noſtratibus omnino ſimiles; patriæ vero toto etiam ventre nigricant. *Hiſt. Ægypt.* I. 198.

late

late governor of *Ceylon*, aſſured us, that thoſe of *Java* never remove. Theſe excepted, every other known kind obſerve a periodical migration, or retreat. The ſwallows of the cold *Norway* *, and of *North America* †, of the diſtant *Kamtſchatka* ‡, of the temperate parts of *Europe*, of *Aleppo* §, and of the hot *Jamaica* ‖, all agree in this one point.

In cold countries, a defect of inſect food on the approach of winter, is a ſufficient reaſon for theſe birds to quit them: but ſince the ſame cauſe probably does not ſubſiſt in the warm climates, recourſe ſhould be had to ſome other reaſon for their vaniſhing.

Of the three opinions, the firſt has the utmoſt appearance of probability; which is, that they remove nearer the ſun, where they can find a continuance of their natural diet, and a temperature of air ſuiting their conſtitutions. That this is the caſe with ſome ſpecies of *European* ſwallows, has been proved beyond contradiction (as above cited) by M. *Adanſon*. We often obſerve them collected in flocks innumerable on churches, on rocks, and on trees, previous to their departure hence; and Mr. *Collinſon* proves their return here in perhaps equal numbers, by two curious relations of undoubted credit: the one communicated to him by Mr. *Wright*, maſter of a ſhip; the other by the late Sir *Charles Wager*; who both deſcribed (to the ſame purpoſe) what happened to each in their voyages. "Returning home, ſays Sir *Charles*, in the ſpring "of the year, as I came into ſounding in our channel, a great flock

* *Pontop. hiſt. Norw.* II. 98.
† *Cat. Carol.* I. 51. *app.* 8.
‡ *Hiſt. Kamtſ.* 162.
§ *Ruſſel Alep.* 70.
‖ *Phil. Tranſ.* No. 36.

of

" of ſwallows came and ſettled on all my rigging; every rope was " covered; they hung on one another like a ſwarm of bees; the " decks and carving were filled with them. They ſeemed almoſt " famiſhed and ſpent, and were only feathers and bones; but be- " ing recruited with a night's reſt, toke their flight in the morn- " ing" *. This vaſt fatigue, proves that their journey muſt have been very great, conſidering the amazing ſwiftneſs of theſe birds: in all probability they had croſſed the *Atlantic* ocean, and were returning from the ſhores of *Senegal*, or other parts of *Africa*; ſo that this account from that moſt able and honeſt ſeaman, confirms the later information of M. *Adanſon*.

Mr. *White*, on *Michaelmas* day 1768, had the good fortune to have ocular proof of what may reaſonably be ſuppoſed an actual migration of ſwallows. Travelling that morning very early between his houſe and the coaſt, at the beginning of his journey he was environed with a thick fog, but on a large wild heath the miſt began to break, and diſcovered to him numberleſs ſwallows, cluſtered on the ſtanding buſhes, as if they had rooſted there: as ſoon as the ſun burſt out, they were inſtantly on wing, and with an eaſy and placid flight proceeded towards the ſea. After this he ſaw no more flocks, only now and then a ſtraggler †.

This rendevouz of ſwallows about the ſame time of year is very common on the willows, in the little iſles in the *Thames*. They

* *Phil. Tranſ.* Vol. LI. Part 2. p. 459.

† In *Kalm*'s Voyage to *America*, is a remarkable inſtance of the diſtant flight of ſwallows; for one lighted on the ſhip he was in, *September* 2d. when he had paſſed only over two thirds of the *Atlantic* ocean. His paſſage was uncommonly quick, being performed from *Deal* to *Philadelphia* in leſs than ſix weeks; and when this accident happened, he was fourteen days ſail from *Cape Hinlopen*.

ſeem

ſeem to aſſemble for the ſame purpoſe as thoſe in *Hampſhire*, notwithſtanding no one yet has been eye witneſs of their departure. On the 26th. of *September* laſt, two Gentlemen who happened to lie at *Maidenhead bridge*, furniſhed at leſt a proof of the multitudes there aſſembled: they went by torch-light to an adjacent iſle, and in leſs than half an hour brought aſhore fifty dozen; for they had nothing more to do than to draw the willow twigs through their hands, the birds never ſtirring till they were taken.

The northern naturaliſts will perhaps ſay, that this aſſembly met for the purpoſe of plunging into their ſubaqueous winter quarters; but was that the caſe, they would never eſcape diſcovery in a river perpetually fiſhed as the *Thames*, ſome of them muſt inevitably be brought up in the nets that haraſs that water.

The ſecond notion has great antiquity on its ſide. *Ariſtotle* * and *Pliny* † give, as their belief, that ſwallows do not remove very far from their ſummer habitation, but winter in the hollows of rocks, and during that time loſe their feathers. The former part of their opinion has been adopted by ſeveral ingenious men; and of late, ſeveral proofs have been brought of ſome ſpecies, at leſt, having been diſcovered in a torpid ſtate. Mr. *Collinſon* ‡ favored us with the evidence of three gentlemen, eye-witneſſes to numbers of *ſand martins* being drawn out of a cliff on the *Rhine*, in the month of *March* 1762 §. And the Honorable *Daines Barrington* communicated to us the following fact, on the authority of the late

* *Hiſt. an.* 935.
† *Lib.* 10. *c.* 24.
‡ By letter, dated *June* 14, 1764.
§ *Phil. Tranſ.* Vol. LIII. p. 101. art. 24.

Lord *Belhaven*, that numbers of ſwallows have been found in old dry walls, and in ſandhills near his Lordſhip's ſeat in *Eaſt Lothian*; not once only, but from year to year; and that when they were expoſed to the warmth of a fire, they revived. We have alſo heard of the ſame annual diſcoveries near *Morpeth* in *Northumberland*, but cannot ſpeak of them with the ſame aſſurance as the two former: neither in the two laſt inſtances are we certain of the particular ſpecies *.

Other witneſſes crowd on us to prove the reſidence of thoſe birds in a torpid ſtate during the ſevere ſeaſon.

Firſt, In the chalky cliffs of *Suſſex*; as was ſeen on the fall of a great fragment ſome years ago.

Secondly, In a decayed hollow tree that was cut down, near *Dolgelli*, in *Merionethſhire*.

Thirdly, In a cliff near *Whitby*, *Yorkſhire*; where, on digging out a fox, whole buſhels of ſwallows were found in a torpid condition. And,

Laſtly, The Reverend Mr. *Conway*, of *Sychton*, *Flintſhire*, was ſo obliging as to communicate the following fact: A few years ago, on looking down an old lead mine in that county, he obſerved numbers of ſwallows clinging to the timbers of the ſhaft, ſeemingly aſleep; and on flinging ſome gravel on them, they juſt moved, but never attempted to fly or change their place; this was between *All Saints* and *Chriſtmas*.

Theſe are doubtleſs the lurking places of the latter hatches, or of thoſe young birds, who are incapable of diſtant migrations. There they continue inſenſible and rigid; but like flies may ſome-

* *Klein* gives an inſtance of *ſwifts* being found in a torpid ſtate. *Hiſt. av.* 204.

times

times be reanimated by an unſeaſonable hot day in the midſt of winter: for very near *Chriſtmas* a few appeared on the moulding of a window of *Merton College, Oxford*, in a remarkably warm nook, which prematurely ſet their blood in motion, having the ſame effect as laying them before the fire at the ſame time of year. Others have been known to make this premature appearance; but as ſoon as the cold natural to the ſeaſon returns, they withdraw again to their former retreats.

I ſhall conclude with one argument drawn from the very late hatches of two ſpecies.

On the twenty-third of *October* 1767, a *martin* was ſeen in *Southwark*, flying in and out of its neſt: and on the twenty-ninth of the ſame month, four or five *ſwallows* were obſerved hovering round and ſettling on the county hoſpital at *Oxford*. As theſe birds muſt have been of a late hatch, it is highly improbable that at ſo late a ſeaſon of the year, they would attempt from one of our midland counties, a voyage almoſt as far as the equator to *Senegal* or *Goree*: we are therefore confirmed in our notion, that there is only a partial migration of theſe birds; and that the feeble late hatches conceal themſelves in this country.

The above, are circumſtances we cannot but aſſent to, though ſeemingly contradictory to the common courſe of nature in regard to other birds. We muſt, therefore, divide our belief relating to theſe two ſo different opinions, and conclude, that one part of the ſwallow tribe migrate, and that others have their winter quarters near home. If it ſhould be demanded, why ſwallows alone are found in a torpid ſtate, and not the other many ſpecies of ſoft billed birds, which likewiſe diſappear about the ſame time? The following reaſon may be aſſigned:

No birds are ſo much on the wing as ſwallows, none fly with ſuch ſwiftneſs and rapidity, none are obliged to ſuch ſudden and various evolutions in their flight, none are at ſuch pains to take their prey, and we may add, none exert their voice more inceſſantly; all theſe occaſion a vaſt expence of ſtrength, and of ſpirits, and may give ſuch a texture to the blood, that other animals cannot experience; and ſo diſpoſe, or we may ſay, neceſſitate, this tribe of birds, or part of them, at leſt, to a repoſe more laſting than that of any others.

The third notion is, even at firſt ſight, too amazing and unnatural to merit mention, if it was not that ſome of the learned have been credulous enough to deliver, for fact, what has the ſtrongeſt appearance of impoſſibility; we mean the relation of ſwallows paſſing the winter immerſed under ice, at the bottom of lakes, or lodged beneath the water of the ſea at the foot of rocks. The firſt who broached this opinion, was *Olaus Magnus*, Archbiſhop of *Upſal*, who very gravely informs us, that theſe birds are often found in cluſtered maſſes at the bottom of the northern lakes, mouth to mouth, wing to wing, foot to foot; and that they creep down the reeds in autumn, to their ſubaqueous retreats. That when old fiſhermen diſcover ſuch a maſs, they throw it into the water again; but when young inexperienced ones take it, they will, by thawing the birds at a fire, bring them indeed to the uſe of their wings, which will continue but a very ſhort time, being owing to a premature and forced revival *.

That the good Archbiſhop did not want credulity, in other inſtances, appears from this, that after having ſtocked the bottoms

* *Derham's Phyſ. Theol.* note *d.* p. 349. *Pontop. hiſt. Norw.* I. 99.

of

of the lakes with birds, he ſtores the clouds with mice, which ſometimes fall in plentiful ſhowers on *Norway* and the neighboring countries *.

Some of our own countrymen have given credit to the ſubmerſion of ſwallows †; and *Klein* patroniſes the doctrine ſtrongly, giving the following hiſtory of their manner of retiring, which he received from ſome countrymen and others. They aſſerted, that ſometimes the ſwallows aſſembled in numbers on a reed, till it broke and ſunk with them to the bottom; and their immerſion was preluded by a dirge of a quarter of an hour's length. That others would unite in laying hold of a ſtraw with their bills, and ſo plunge down in ſociety. Others again would form a large maſs, by clinging together with their feet, and ſo commit themſelves to the deep ‡.

Such are the relations given by thoſe that are fond of this opinion, and though delivered without exaggeration, muſt provoke a ſmile. They aſſign not the ſmalleſt reaſon to account for theſe birds being able to endure ſo long a ſubmerſion without being ſuffocated, or without decaying, in an element ſo unnatural to ſo delicate a bird; when we know that the otter §, the corvorant, and the

* *Geſner Icon. An.* 100.

† *Derham's Phyſ. Theol.* 340. 349. *Hildrop's Tracts*, II. 32.

‡ *Klein hiſt. av.* 205, 206. *Ekmarck* migr. av. Amæn. acad. IV. 589.

§ Though entirely ſatisfied in our own mind of the impoſſibility of theſe relations; yet, deſirous of ſtrengthening our opinion with ſome better authority, we applied to that able anatomiſt, Mr. *John Hunter*; who was ſo obliging to inform us, that he had diſſected many ſwallows, but found nothing in them different from other birds as to the organs of reſpiration. That all thoſe animals which he

the grebes, ſoon periſh, if caught under ice, or entangled in nets: and it is well known, that thoſe animals will continue much longer under water than any others to whom nature hath denied that particular ſtructure of heart, neceſſary for a long reſidence beneath that element.

he had diſſected of the claſs that ſleep during winter, ſuch as lizards, frogs, &c. had a very different conformation as to thoſe organs. That all theſe animals, he believes, do breathe in their torpid ſtate; and, as far as his experience reaches, he knows they do: and that therefore he eſteems it a very wild opinion, that terreſtrial animals can remain any long time under water without drowning.